2002 Public Health Improvement Plan

Always working for a safer and healthier Washington

2002

A Vision for Washington's Public Health System

Washington State's Public Health Partners envision a public health system that promotes good health and provides improved protection from illness and injury for people in Washington State.

To help realize that goal, the public health system is committed to:

- Focusing our resources effectively, defining and monitoring outcomes for key public health issues and trends, and emphasizing evidence-based strategies.
- Maintaining a results-based accountability system, with meaningful performance measures and program evaluation.
- Using a method of funding across the public health system that is stable, sufficient, and equitable.
- Using standard technology across the public health system.
- Maintaining a workforce that is well-trained for current public health challenges and has access to continuous professional development.
- Facilitating discussions about health care access and delivery issues from the perspective of community systems, where the experiences of patients, providers, purchasers, and payers are considered important components.
- Applying communication strategies that are effective and foster greater public involvement in achieving public health goals.
- Establishing new coalitions and alliances—among stakeholders, policy makers, and leaders—that support the mission of public health.

2002 Public Health Improvement Plan

December 2002

Washington State Department of Health

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Washington State Department of Health

Northwest Center for Public Health Practice, University of Washington School of Public Health and Community Medicine

Washington State Board of Health

Washington State Association of Local Public Health Officials (WSALPHO)

Washington State Department of Health

December 30, 2002

As the Secretary of Health for Washington, I know that a strong public health system is essential to preserving the health, safety, and quality of life that we all expect.

The fact that public health is a critical government service is underscored by experiences in recent months. We have responded to fears about anthrax in the mail. We have prepared a plan to vaccinate people against smallpox if global events warrant such action. We have confirmed that West Nile virus is present in birds in our state, a forewarning of possible human illnesses.

All the while, public health leaders in Washington have diligently pursued a course of action that serves the people of our state very well: implementing the 2000 Public Health Improvement Plan and setting new objectives for the coming two years. Through our continued investment in the PHIP, our partnership is building a stronger, more responsive public health system. We are setting—and accomplishing—important goals, despite a constant strain on resources and the toll that is taken by events such as bioterrorism and emerging diseases.

In the pages that follow, you will read the combined ideas of many people who make our state's public health system work. This document represents both their vision and their commitment to achieving it through thoughtful action. We are creating a framework for public health that will serve us into the future because it is based on principles that we have found indispensable over time: teamwork, collaboration, respect among colleagues from all sectors, courage to be innovative, willingness to listen and change our thinking, and commitment to act when we can better protect and improve the health of the people of Washington.

As I review the challenges we have faced over the past two years—and ponder those that lie ahead—I am grateful to all who sustain the public health system of our state for their generous contribution of time and spirit to shape an interdependent, statewide *system* of public health resources. And I am confident that because of our partnership for public health improvement, we are better prepared today to face tomorrow's challenges.

Mary C. Selecky
Secretary, Washington State Department of Health

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PHIP 2002: A World of Threats and Opportunities

The goal of the Public Health Improvement Partnership (PHIP) is to ensure that Washington's public health system is prepared to address every challenge that could jeopardize the health of Washington residents. As this document goes to press, these challenges to our state's public health system are daunting. We are preparing to administer smallpox vaccine for the first time in many years. We are quickly mobilizing resources to shore up preparedness for other forms of bioterrorism and public health emergencies. West Nile virus has emerged in our area, and we are faced with looming economic uncertainty that threatens the basic infrastructure of our system.

Every two years, this document reports on progress we have made to strengthen the public health system and makes recommendations for important next steps toward meeting this goal. In the following chapters, you will read about accomplishments derived from working on previous PHIP recommendations and about innovative approaches to public health issues that reflect the dedication and spirit of cooperation of our public health workers. While we are proud of the work done to date, we acknowledge that we are quite far from achieving our vision of the public health system, as described on the inside front cover of this report. The progress we have made is fragile; it will be quickly lost if we lessen our efforts statewide.

We know that challenges we face today will require serious and sustained commitment over the coming years. It is imperative that we maintain a public health system resilient enough to meet them.

Threats abound

All of the country's public health officials, at the local and state levels, are participating in a national effort to develop capacity to detect and respond to bioterrorism events. The anthrax scare that occurred during 2001 demonstrated clearly the importance of having a public health system prepared for swift response to such a threat. That experience—felt in every community in our state—required scientific expertise and effective communication (see box, page 9). But the extraordinary demands—in time, staff, and funding—that this new test presents come at a time when Washington's public health system is struggling to accommodate the potential loss of key funding from all government sources on which it depends: federal, state, and local revenues.

The erosion of resources threatens to destabilize the system. For years, tight budgets have challenged the system's ability to keep up with demands for services. Each program has been stretched beyond its actual funded level. It is increasingly difficult to recruit and maintain staff with the necessary specialized skills to perform such public health work as disease investigation and control, public health nursing, and food safety inspections.

Dwindling resources aggravate a persistent problem in public health, which historically has been underfunded. The committee that studied financing issues for this report agreed that across-the-board investments for public health should be substantially higher just to carry out basic services. It calculates that the system is running on only a third of the resources it needs (see page 23).

Increased demands, coupled with diminishing resources, will threaten the public health system in the following ways:

Reduction and elimination of programs

As revenue shrinks at all levels of government, the programs supported by those revenues will be cut back or eliminated. In public health, cutbacks will require tough choices. What level of immunization do we maintain and for which diseases? How can we continue responsible follow-up on infectious diseases when a scourge of the past—like tuberculosis—begins to re-emerge? Do we reduce effective prevention programs, such as the Women, Infants and Children (WIC) nutrition program, when we know they prevent later health problems and costs

by helping children get a healthy start in life? We have learned that we cannot secure needed resources simply by shifting costs among different levels of government—because all parts of government are today feeling budget pressures.

Lowered response capability

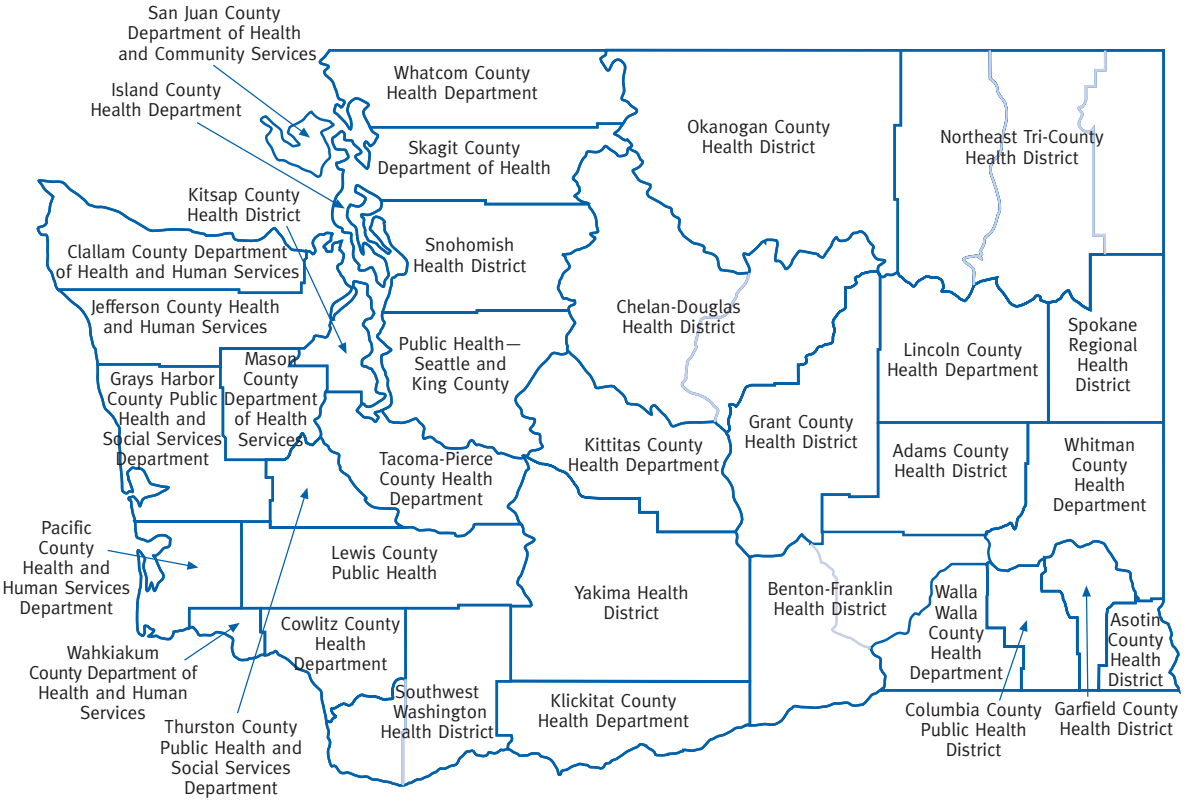
If public health services are scaled back across many programs, the entire system will be less robust and less able to respond to emergencies. A community threatened by an infectious disease outbreak such as measles or meningitis will need a cadre of people prepared to drop their day-to-day activities to respond to this crisis. If resources become too thin, communities may find themselves without the public health physicians, nurses, and epidemiologists necessary to mount a successful immunization campaign, just when they need them most.

Compromised environmental health

Most environmental health services, such as inspections of restaurants and septic tank systems, are supported by fees. But the fees charged do not always cover the full cost of service and rarely cover the "population-based" prevention and assessment activity that must go on outside of inspections. Examples of such activities are food safety education for the public, detection of "non-point" pollution affecting drinking water supplies, and meth lab clean-up. When these population-based services are neglected, we run the risk of allowing serious degradation of the food, air, and water that we all count on to remain healthy.

continued on page 10

Washington's Local Health Jurisdictions, 2002



In 2002, there were 34 local health jurisdictions in Washington State (see list, page 44). In 2003, there will be 35 because Clark and Skamania counties will establish separate departments. These are currently combined as the Southwest Washington Health District.

Mobilizing Against Bioterrorism

Mid-October 2001. The United States, still reeling from the September 11 attacks, is facing a new menace in domestic bioterrorism. Anthrax—a disease known to be contracted through exposure to infected animals—is turning up in the workplace and the mail. White powder, anywhere, is suddenly suspected of containing deadly anthrax spores.

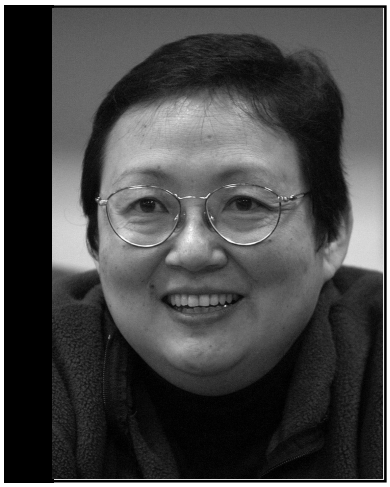
Washington's public health emergency response system—its network of medical providers and state and local public health agencies—is ready as always to investigate, report, and respond to health risks. But what real threat are the state's residents facing from white powder? It could be deadly, but the overwhelming odds are that it's harmless.

Elsewhere in the country, state public health systems are being inundated with substances that a terrified public thinks might be anthrax. But in Washington, the state Department of Health works out a triage structure to identify the most risky specimens for testing at the state lab near Seattle. The process engages public health workers from throughout the state, who spend thousands of hours on the telephone and in meetings, helping the public understand the potential risks of anthrax, providing training to first responders and law enforcement officials, investigating suspicious samples, and quickly communicating information about a situation that changed hourly.

Within a week, public health officials issue guidelines on how to determine when suspicious powders are a real threat. This information is communicated immediately to Washington's 34 local public health jurisdictions and to 300 law enforcement agencies throughout the state, who respond to more than 1,000 calls about suspected anthrax. But with the triage in effect, the state lab receives only 150 specimens to test—a manageable number, in contrast to many states.

Washington State did not experience an anthrax case in the anxious months after September 11, but a high level of public concern called on all its available resources to respond. The public health system learned that it could respond quickly and effectively to the understandable fears, but agencies worked under tremendous pressure to keep up with demands for information.

The situation underscored what public health officials already knew: the resources needed to respond were extremely thin, and a great deal more work must be done to shore up the public health infrastructure in the event that a real case—and not just the threat of one—were to happen.



Shortly after the threat of anthrax was known in Thurston County, Health Officer Diana Yu held training sessions for local emergency responders, including fire and police staff.

continued from page 8

Untreated health problems

Appropriate medical care is essential. When access to care is restricted, health problems worsen until they become acute, life threatening, or a risk causing disability. At this point, people seek treatment at emergency rooms, a costly and inefficient setting for routine care. When large numbers of people cannot get the health services they need, access becomes a community problem. In a faltering economy, thousands of Washington residents may lose employer-subsidized health insurance or be unable to buy individual polices. Others may suffer from possible cutbacks in federal and state-supported medical care. Taken together, these trends may force down access to health services for entire communities, as providers move away or cannot maintain economically viable clinics or hospitals.

The access problem leaves the state's public health system in a difficult spot. One function of public health is to help people obtain the health services they need. But public health agencies cannot take the place of the health services delivery system. Instead, they must focus on the vital role of helping communities identify the health care resources they need and strategize how to shore them up across the state.

Failure to prevent

Prevention is the least costly way to reduce both the burden of health care costs and suffering from illness. Prevention can take place at the individual level, such as when a health care provider diagnoses a problem in a sufficiently early stage to restore health. But the greatest prevention opportunities stem from large-scale, population-based efforts. Examples include lowering smoking rates, reducing drunken driving fatalities, and keeping chemical pollutants from seeping into sources of drinking water. Unfortunately, our health dollar investments have been heavily weighted toward sickness and clean-up, so we are failing to capture the savings that prevention investments could achieve.

Opportunities before us

While the current public health and health care issues present extreme challenges, Washington has some opportunities to make a tough situation better. First among them is the Public Health Improvement Partnership (PHIP), whose members include:

- The Washington State Department of Health,
- The Washington State Association of Local Public Health Officials (WSALPHO)
- The Washington State Board of Health, and
- The Northwest Center for Public Health Practice, part of the University of Washington School of Public Health and Community Medicine.

These partners came together as Washington implemented public health improvement legislation passed in 1993 and 1995, and since then, they have guided changes in how the state and local public health system is managed, organized, and financed.

The partners have created a common vision of the public health system of the future and are actively pursuing its objectives. They have developed a detailed work plan (see page 12) and have pooled resources and staff time to support it. Hundreds of people from the public health workforce have been tapped to provide expertise to carry out a broad range of work plan activities.

In its collaborative approach to state and local public health policy, its outreach to community partners, and its commitment to quality

"Working with the Public Health Improvement Partnership over the last decade, I've watched a series of exciting changes transform Washington's public health system."—State Health Officer Maxine Hayes

improvement, the PHIP work plan is an excellent model for the direction urged in two recently published reports from the federal Institute of Medicine (see box, below).

The dedicated attention to the PHIP work plan and its emphasis on supporting a state and local public health *system* has fostered innovations that will be used in Washington and emulated across the country. Among these are: creating a well-researched health report card, setting clear standards for public health practice, developing cost models for basic public health services, implementing standardized electronic disease reports, establishing a multi-state training network, developing a menu of critical health services, and creating a toolkit for effective communication about public health.

For nearly a decade, Washington's Public Health Improvement Partnership has set ambitious goals to improve the health of people who live in Washington and to ensure that they receive adequate public health protection at all times, in all corners of the state. This is what every resident has a right to expect.

The PHIP's efforts over the past decade have enhanced the ability of the public health system and its partners to improve public health expertise, achieve greater overall efficiency, and pursue clearer goals. One objective that remains elusive, however, is to establish stable and sufficient funding for Washington's public health system. Despite the achievements of the PHIP, this issue continues to cloud the future.

Institute of Medicine: Public Health Needs New Partners

In 1988, the federal Institute of Medicine (IOM) forever changed the direction of U.S. public health policy with its report, *The Future of Public Health.* The report urged public health agencies to focus on their core mission of community-level disease prevention and health promotion rather than categorical programs and clinical services. Much of the guidance for the work of Washington's Public Health Improvement Partnership comes from the IOM report. In November 2002, the IOM published two reports that will likely have a profound impact on public health policy in Washington and other states. Together, they recommend an approach to public health improvement that is consistent with the work of Washington's PHIP. University of Washington School of Public Health and Community Medicine Dean Patricia Wahl served on the committees that produced both of these reports.

The Future of the Public's Health in the 21st Century (http://www.nap.edu/catalog/10548.html) reports on the nation's capabilities to address new health challenges such as West Nile virus, the threat of bioterrorism, and the growing prevalence of chronic conditions driven by social and environmental factors. The Institute contends that only "a well-integrated public health system supported by political will, public and private partnerships, and other necessary resources can meet new and ongoing health challenges."

The IOM recommends a new approach to public health policy through which the health care delivery system, academia, community organizations, business, the news media, individual members of society, and others all work as partners with public health agencies to promote and protect the nation's overall health. This approach incorporates new public-private partnerships; investment in public health infrastructure at the federal, state, and local levels; and a federal government-led effort to improve health care availability.

Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century (http://www.nap.edu/catalog/10542.html) suggests ways to train public health professionals to meet new health threats. The report addresses issues such as formal training for public health workers, something only a small minority now receives, and certification as to competencies that include communication and policy skills. The report emphasizes the value of collaboration among professional schools and degree programs, local and state health departments, and community organizations.

Public Health Improvement Partnership 2002
PHIP 2002 Work Plan Elements and Committee Objectives

Work Plan Element	
Key health indicators	✔ Publish *The Health of Washington State.* ✔ Gather report card data, publish results, evaluate report card. ☐ Add data to Behavioral Risk Factor Surveillance System surveys.
Standards for public health	✔ Distribute revised standards and communications tools. ✔ Provide training on standards and quality improvement. ✔ Plan and conduct baseline study and analyze data.
Financing public health	✔ Describe and validate a list of core public health services. ✔ Review funding formulas that guide current resource allocation. ☐ Study financing and performance links and recommend actions.
Information technology	✔ Continue VISTA software for public health data and move to web-based design. ✔ Conduct an inventory of technology programs and capacity. ✔ Implement PHIMS, a system for managing public health and disease information. ☐ Set committee's five-year plan for compatible programs.
Workforce development	✔ Describe core competencies needed in public health practice. ✔ Develop and introduce new curricula. ✔ Establish a Leadership Institute for public health. ✔ Support Local Boards of Health workshop. ☐ Design and conduct a study to describe (enumerate) the public health workforce.
Access to critical health services	✔ Disseminate the Menu of Critical Health Services, seeking additional comment.
Effective communication	✔ Complete research and a strategic plan for effective communication. ✔ Provide products and tools for communicating about public health. ☐ Provide training in the use of new tools.

Summary of PHIP Recommendations for 2003-05

Key Health Indicators

1. Improve and sustain the availability of community-level data by enhancing data collection that supports community-level analysis.
2. Develop a process to collect and publish Report Card data and examples of interventions, including collection and dissemination of data that can be used for communities and subgroups.
3. Distribute the Report Card and action guide widely and encourage public and private organizations to use it as they allocate resources and develop work plans to improve health outcomes.
4. Set numerical targets for indicators that address the question, How healthy do we want to be?

Public Health Standards

1. Analyze baseline data, including exemplary practices, to determine priorities for system-wide improvements.
2. Adopt a schedule and process to support regular use of *Standards for Public Health in Washington State* to evaluate and describe the status of Washington's public health system.
3. Continue to describe needed administrative capability, and field test and revise the description for use in future evaluation processes.
4. Link the work of the PHIP Standards Committee with that of the Finance Committee, Key Health Indicators Committee, and other committees to assure that actions guiding public health system improvement will yield maximum efficiency in performance and effectiveness.

Financing Public Health

1. Establish a public health financing system that provides stable and sufficient funding allocated consistently throughout the state.
2. Adopt a cost model to document the cost of providing public health services. Link costs with related activities for public health improvement, including workforce development and performance standards.
3. Consolidate advisory committees to address funding allocations to simplify the allocation process and increase understanding and acceptance of the allocation methodology.

Information Technology

1. Define a basic level of information technology capacity for all health departments.
2. Assure that the public health workforce participates in computer-based training and emergency communication drills.
3. Implement standard data security procedures, install software and equipment, and share protocols for data management and data access system-wide.
4. Develop data standards.
5. Continue information technology coordination.

Workforce Development

1. Complete a descriptive census of the public health workforce to document the range of workers available and to identify training needs.
2. Adopt a set of expected worker competencies as the basis for developing training programs, college course curricula, performance measurement, and other aspects of public health workforce development processes.
3. Develop a training system that links expected competencies with learning opportunities, tracks training data, and helps people obtain the information they need to perform their work.
4. Collect and distribute best practices for increasing public health workforce diversity.
5. Pursue strategies that address leadership development and systematic incentives for workforce development.

Access to Critical Health Services

1. Establish a Committee on Access to Critical Health Services to guide use of *Standards for Public Health in Washington State* on access.
2. Expand, update, and improve the Menu of Critical Health Services and involve public health, private providers, and purchasing groups in using the Menu.
3. Promote "exemplary practices" associated with the access standard for public health.

Effective Communication

1. Prepare public health workers and community partners to describe the business of public health agencies and how they work to protect and improve the health of people.
2. Assure that all public health agencies are prepared to carry out effective communications when responding to public health emergencies and local issues of concern.

Always Working for a Safer and Healthier Washington

Key Health Indicators: Information That Works

The Washington Legislature, as part of the PHIP, directed the Department of Health to look for "the key health outcomes sought for the population" in the great volume of health information it collects. To do this, the PHIP Key Health Indicators Committee has focused its work on a deceptively simple question: How healthy are we?

In the first phase of work during 1999-2001, the committee identified indicators for these sought-after outcomes. It used an approach that focused primarily on modifiable *determinants* of health and well-being (see page 16). It developed a minimal set of indicators designed to give a big picture look at major determinants of health in Washington, including physical and social environments, health care, and health behaviors. The indicators, taken together, create a "Report Card on Washington's Health."

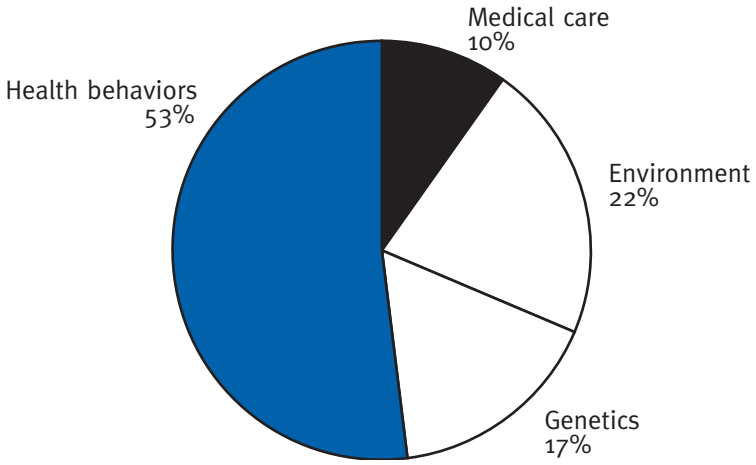
The Report Card (shown on page 17) provides a framework to disseminate timely data and communicate with the public about the health and well-being of Washington residents. It is a unique approach to monitoring the health of a state because it is concise, it is designed for use by both health policy makers and the general public, and it attempts to address the full scope of factors that determine health—that is, it generally measures *health* rather than *illness*.

While the Report Card is intended to provide an overall context for health in Washington, a single indicator, by itself, cannot provide a picture of the complex and subtle nature of the real world. Developing this picture requires understanding the scientific evidence about what causes an indicator to be high or low; it requires viewing each indicator in relation to other indicators; and it requires delving more deeply into each indicator to see if there are disparities in the level of the indicator for people from different race and ethnic groups, with different levels of income or education, living in different geographic areas, or with differences in other less easily determined factors.

For example, the indicator for "Are we physically active?" tells us whether our physical activity levels are high or low, but it does not tell us why we are active or inactive. To understand why, we need to consider the social, economic, cultural, and personal contexts that encourage or create barriers to physical activity. Likewise, an indicator of access to health care, by itself, cannot describe the relationship between use of preventive services and cultural appropriateness of health care or trust in receiving high-quality health care regardless of race, ethnicity or economic status. The Report Card is intended to trigger community dialogue and action by identifying key health issues and encouraging community

Key Health Indicators Chairs Jac Davies (Assistant Secretary of Health) and Ward Hinds (Director, Snohomish Health District) have led work to set measurable health indicators so that the state will be able to answer not only the question, "How healthy are we?" but also in the future, "How healthy do we want to be?"

What Determines Our Level of Health?



Source: "Ten Leading Causes of Death in U.S.," U.S. Centers for Disease Control and Prevention, 1975

leaders and policy makers to delve deeper into the background context for those issues and then to develop policies and programs that will truly protect and improve the health of Washington's residents.

The committee circulated the draft Report Card among different types of users—including business, community groups, and health care organizations—and incorporated their comments in the final indicator set it approved in 2001. The Department of Health has begun compiling statewide data for the Report Card measures (see Appendix 3). The committee has also identified local, national, and international data sources. Other current committee work includes establishing the frequency of data analysis and dissemination, identifying new data sources, and sharing best practices associated with each indicator.

The Report Card provides the short answer to "how healthy are we?" The Department of Health presents a more detailed answer in *The Health of Washington State*, a compendium of data, trends, disparities, and potential interventions for significant health issues. This document, published during Summer 2002, is available on the web (see box).

Even with stable frameworks in place to collect, organize, and share health information, the Key Health Indicators Committee has encountered barriers to collecting some data. Several of the original indicators were adjusted to fit available data. Thus, we measure the number of *times* people eat fruits and vegetables each day, not the number of *servings* per day. We measure compliance of relatively large public water systems for a limited array of contaminants instead of all public water systems and all regulated contaminants. Data for other indicators were missing altogether, but the committee has worked to modify existing data systems to make sure that this information is available in the future.

Collection of community-level data has also emerged as a limitation. Some of the indicator data are currently not available at the community (county or smaller geography) level. Nonetheless, this information is needed for communities and the state to document problems, develop and implement interventions, and evaluate program

For more information about Key Health Indicators:

The Health of Washington State
http://www.doh.wa.gov/HWS/default.htm

VISTA Public Health Data
http://www.doh.wa.gov/OS/Vista/homepage.htm

PHIP Key Health Indicators Committee Page
http://www.doh.wa.gov/phip/Indicators.htm

Community Guide to Preventive Services
http://www.thecommunityguide.org/home_f.html

Coalition for Healthier Cities and Communities and the International Healthy Cities Foundation
http://www.healthycommunities.org

effectiveness. A good short-term solution has emerged that will allow county-level data for questions included on the Behavioral Risk Factor Surveillance System, which provides data for 8 of the 19 measures on the Report Card. But we need to pay additional attention to sustaining this valuable resource. Without local level data, Washington's Health Report Card is unlikely to generate local level action or to affect public views about health.

The Key Health Indicators Committee is also developing an action guide for local public health agencies, community organizations, businesses, schools and others to use in their communities to implement the Report Card and share best practices. The guide will give examples of ways individuals, organizations, and communities can positively influence the status of these indicators. This dissemination is critical if the Report Card is to engage and inform public policy makers, to help them make good decisions, to measure the progress of and allow comparisons between communities, and—most important—improve the health status of all who live in Washington State.

Report Card on Washington's Health—"How healthy are we?"

General Health Status:

Years of healthy life | Emotional well-being | Healthy child development

Health Determinants:

How safe and supportive are our surroundings?

How safe are our food, water, and air?

- Illnesses commonly associated with unsafe food, unsafe water, or poor hygiene
- Safe drinking water
- Air quality

How safe and supportive are our communities?

- Economic:
  - Percent below poverty threshold
- Social connectedness:
  - Civic involvement/interpersonal trust
  - School retention rates
- Injuries and violence:
  - Unintentional injuries
  - Domestic violence
  - Child abuse and neglect
  - Violent crimes

How supportive is our health care system?

- Access to health care
- Vaccine-preventable diseases

How healthy are our behaviors?

Do we smoke cigarettes?

- Percent non-smokers

Do we eat fruits and vegetables?

- 5 fruits and vegetables a day

Are we physically active?

- 30 minutes a day, 5 times a week

Do we abuse alcohol?

- 5+ drinks on one occasion during last month

Recommendations for 2003-2005

1. Improve and sustain the availability of community-level data by enhancing and supporting data collection systems that allow community-level analyses.

   Meaningful information on health is specific for a community or group of people. When health data accurately describe the threats, behaviors, or opportunities that apply to you and your community, they provide a basis for action on local priorities and a basis for charting progress over time.

2. Develop a systematic process for collecting and publishing the Report Card data and examples of interventions, including collection and dissemination of data that can be used for communities and subgroups, such as race or ethnic groups or urban and rural residents.

   Health improvement is a long-term strategy and must be sustained over time. Effective investments in health improvement must be supported by a continuous cycle of evaluation, measurement, and reporting.

3. Distribute the Report Card and action guide widely. Encourage public and private organizations to use the Report Card as they allocate resources and develop work plans to improve health outcomes.

   Incorporate the Key Health Indicators into existing report cards. The health of all people in Washington depends on the actions of many partners, including public and private sectors, health care providers, and a broad range of community organizations. The Report Card provides all of them with opportunities to focus on innovative efforts that can result in better health, whether through health care, education, social support, or environmental changes.

4. Set numerical targets for the indicators that address the question, “How healthy do we want to be?”

   Setting realistic numerical targets for health indicators, based in evidence from the best available science, will let us measure progress over time. Numerical measures will provide a clear picture of how healthy we are and where we are gaining—or losing—ground.

Public Health Standards: Essential Programs for Improving Health

You not only need to know where you want to go. You must also know how far you have to go to get there.

This proposition underlies the work of the PHIP Standards Committee. Finalized and published in June 2001, *Standards for Public Health in Washington State* provide a framework to measure the performance of the state's public health agencies and programs. The standards state clearly what every citizen has a right to expect of the government public health system, in terms of:

- Understanding key health issues,
- Protecting people from disease,
- Assuring a safe and healthy environment,
- Promoting healthy living, and
- Helping people get the services they need.

The standards recognize that both the State Department of Health and every local health department are part of the larger public health system. State and local agencies are interdependent. They each have different roles to play, but when it comes to protecting public health, every agency in the system is a critical player in keeping residents healthy.

The performance standards work began with a field test that the Public Health Improvement Partnership conducted during 2000. Next, copies of the standards were distributed, along with communication materials interpreting them, to public health agencies and the Washington Legislature. To help public health workers understand and use the standards, the PHIP contracted for training up to 200 people in eight settings across the state. Managers and staff learned how to use the standards to integrate quality improvement efforts into public health practice. This training is an important component of the PHIP workforce development strategies described on page 31. *Standards for Public Health in Washington State* were the basis for defining competencies needed by public health workers.

The training also prepared public health officials for a "baseline assessment" of the standards. Establishing a baseline was necessary to describe Washington's public health system as it is currently performing. The standards actually reach beyond what the public health system is capable of with current resources. Measuring performance by these standards over time will demonstrate both the achievements and the pressing needs of public health agencies and programs.

"Performance measurement is key to accountability for Washington's public health system."
—Standards Committee Co-chair Torney Smith (Deputy Director, Spokane Regional Health District) and colleagues

The baseline assessment, conducted in 72 local and state programs and sites during 2002, revealed what the system is performing well, identified what the system does not perform well, and provided an opportunity to learn from the system's high performers. The charts on page 21 show overall results. These are aggregate findings that summarize many specific measures for the State Department of Health and every local health jurisdiction.

At each site visit during the baseline assessment, consultants evaluated the ability of the agency to demonstrate performance, based on measures associated with each standard. Consultants also collected examples of excellent work—hundreds of real-life "exemplary practices" that will be shared electronically in the form of a web-based toolkit, available to everyone.

In general, the baseline assessment showed that Washington's public health system performs strongest in the topic areas of assessment, managing communicable disease and other risks, and in prevention and community health promotion. Weaker performance areas include protecting environmental health and assuring access to critical health services. The assessment also found a connection between the size of local jurisdictions, their budgets, and their number of employees with performance on the standards. In general, larger departments were better able to meet the standards, but this was not always true. Some small and rural local public health jurisdictions performed better on some standards than their urban counterparts. So, the baseline made clear that, in addition to having sufficient staff and financial resources, strong leadership, agency focus, and goal-setting are important elements of performance.

Individual agencies and the Department of Health will review the assessment findings in site-specific reports, which will help them set priorities and target resources to improve performance. The findings will also reveal opportunities for pooling resources to bring about system-wide improvements.

In addition to the five topics addressed by the standards, the committee recognizes that basic administrative capacity must be in place for a health jurisdiction to carry out its responsibilities. The committee has begun to define administrative expectations, addressing such areas as accounting systems, facilities management, and personnel policies. This work will be refined and field-tested in the coming months (see Appendix 4).

The PHIP Standards Committee is now working on ways to secure the capacity and resources needed to continue system improvement efforts. They believe that "what gets measured, gets done." A sustained effort to measure system-wide quality improvement achieved through the standards process is critical to improving public health and establishing accountability within the system. Washington's public health leadership must now mobilize the information gained from the baseline by linking it to the priorities they set for their agencies, both state and local.

For more information about Public Health Standards:

Standards for Public Health in Washington State
http://www.doh.wa.gov/Standards

PHIP Public Health Standards Committee Page
http://www.doh.wa.gov/phip/Standards.htm

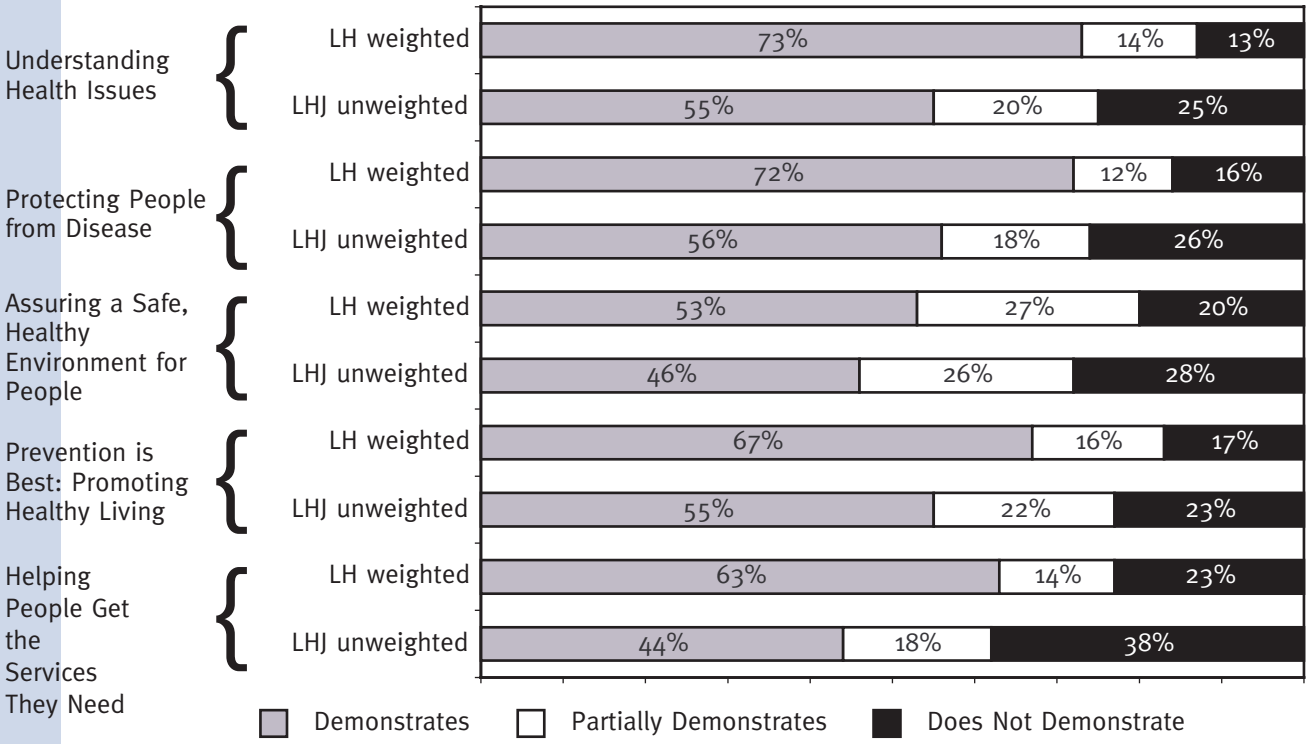
Standards for Public Health in Washington State: Baseline Evaluation Report
http://www.doh.wa.gov/phip/documents/BaselineReport11-12.pdf

Turning Point Project—Performance Management Collaborative
http://www.turningpointprogram.org/Pages/perfmgt.html

National Public Health Performance Standards Program
http://www.phppo.cdc.gov/nphpsp/

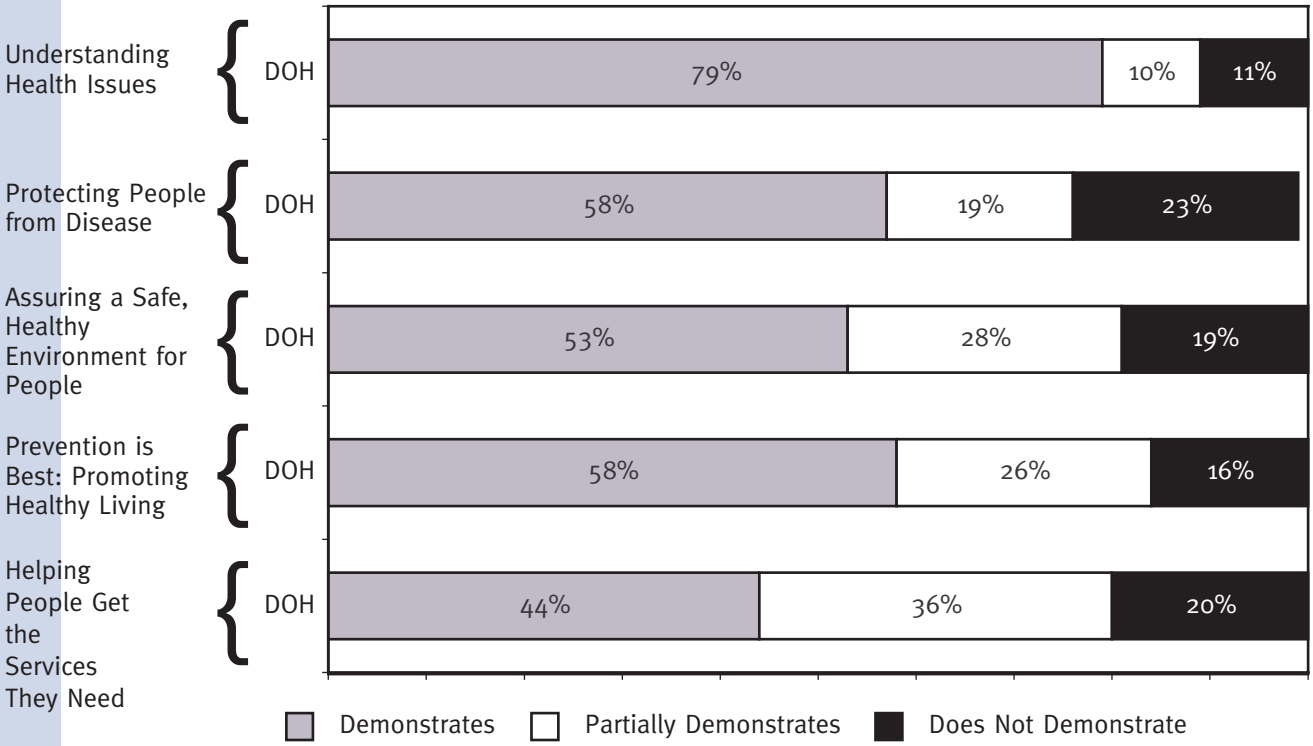
Standards for Public Health in Washington State—Exemplary Practices
http://www.doh.wa.gov/phip/StandardsExemplaryPractices.htm

Where We Are in 2002: Demonstrating Where We Can Meet Washington's Standards for Local Public Health Jurisdictions



Weighted scores indicate the percent of the population affected by the demonstration level. Unweighted scores indicate the percent of jurisdictions affected by the demonstration level.

Where We Are in 2002: Demonstrating Where We Can Meet Washington's Standards for Department of Health Programs



Recommendations for 2003-2005

1. Analyze baseline data, including exemplary practices, to determine priorities for system-wide improvements.

   The greatest opportunity to strengthen the public health system will come from joining efforts across local jurisdictions, working in concert with the state Department of Health. Data from the baseline study will help public health leaders select and focus on the most important opportunities for improvement.

2. Adopt a schedule and process to support regular use of *Standards for Public Health in Washington State* to evaluate and describe the status of Washington's public health system.

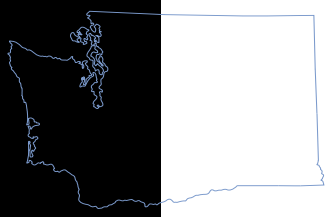
   The baseline data will help us take action to improve the system now, but real progress will depend on consistent follow-up, over time. The Standards Committee recommends measurement by independent consultants at intervals of about three years, with self-assessment during intervening years.

3. Continue to develop the description of needed administrative capability, and field test and revise it for use in future system-wide evaluation processes.

   Administrative standards address the infrastructure needed for public health agencies to carry out their mission. A set of standards has been developed that address basic requirements such as accounting, technology support, and personnel policies. Once tested, these can be included in future assessments of the public health system.

4. Link the work of the PHIP Standards Committee with that of the Finance Committee, Key Health Indicators Committee, and other committees to assure that actions guiding public health system improvement will yield maximum efficiency in performance and effectiveness.

   The PHIP committee chairs meet regularly to exchange information, coordinate work plans, and set complementary goals. This important process has become one way we shape Washington's public health system and should continue.



Financing Public Health: Investment that Works for Better Health Solutions

Public health protection is an essential government function, like police or fire protection. Yet financing of the public health system is perched on the brink of crisis, reflecting the tough issues that plague other aspects of state and local government.

The financing picture for public health is complex. Different agencies, programs, and revenue sources are involved at local, state, and federal levels. All of them work on different funding cycles. The complexity makes it difficult to sort out problems and propose solutions. The PHIP Finance Committee has studied four key problem areas:

Historical, persistent underfunding

The National Conference of State Legislatures describes state public health budgets as "minuscule" compared with government spending for individual health care. They attribute this in part to the fact that health care spending is almost exclusively linked to entitlements, while public health spending is not. Without dedicated resources, public health is vulnerable in every budget cycle.

When the 1994 and 1996 PHIPs committed Washington State to a goal of "stable and sufficient" funding for public health, it was with the understanding that the current system wasn't working. The Legislature directed local and state health officials to write standards for public health and determine the costs of adequate services. The reports concluded that the system was affected by very serious underfunding. This was confirmed by the Public Health Finance Committee's activities during the past few years. Its analysis suggests that today's public health system has only about a third of the resources it needs to carry out basic public health functions.

Erosion of core funding

Support for core public health services began to decline during the 1970s, when the state repealed dedicated funding for public health services. (See box, next page.)

Inconsistent levels of investment

One of the most difficult problems in the public health financing realm is the lack of consistency across counties. Washington's 34 independent local boards of health govern local funding decisions, so it is possible for significant reductions to accrue without anyone seeing the whole picture. There is no local minimum level of investment for public health, a situation that leads to great disparities over time. In 2001, county tax support ranged from 94 cents to $26.05 per person per year. While the amount invested locally depends on many factors (overall county revenues, past levels of spending, decisions about fees, participation by cities within a county), the sheer size of this disparity indicates that

"We have worked on achieving stable and sufficient funding of public health in Washington for more than a decade. This effort is more important than ever in the wake of chronic underfunding in recent years."
—Finance Committee Co-chair Tim McDonald (Health Director, Island County Health Department)

The Erosion of Public Health Funding in Washington

1976: The Washington Legislature repeals dedication of a 21-cent local property tax to public health. City and county financing is now subject to local decision-making, and a wide variation in funding and service levels develops in the ensuing years.

1993: Anticipating support from the Motor Vehicle Excise Tax (MVET), cities are released from funding public health, to take effect in 1996.

1996: The MVET for public health takes effect, but this source provides $7 million less in funding than would city contributions. Health departments are held to historical local funding amounts, so a wide variation in support is sustained.

2000: MVET funding is repealed, just as this revenue source—through inflation growth—approaches the 1995 funding levels.

2001: The Legislature restores or "backfills" MVET, but at 90%, so resources drop by more than $2.5 million a year.

2002: MVET for public health is scheduled to be dropped from budgets beginning July 1, 2003. This would leave a $26 million shortfall for local health departments, a single reduction of 8% in a year when many other funding reductions are anticipated in local, state, and federal programs.

not all Washington residents receive the same level of public health protection.

Categorical constraints

The funding provided from state and federal sources nearly always carries strict categorical restrictions for use in special programs. The spectrum of programs ranges from clean water to HIV/AIDS prevention. Taken alone, each special program seems very important. The problem occurs when many special programs are laid onto an agency already struggling with lack of funding for core services or basic infrastructure. The result is a patchwork of unrelated public health efforts and no flexibility to use resources, in a common-sense way, to fill in the missing pieces at the community level.

One source of state funds, called Local Capacity Development Funding (LCDF), is an exception to the categorical fund problem. The state provided these resources to local public health agencies at the inception of PHIP work in the mid-1990s. Local health officials have continually cited LCDF as their most valued state funds. While the size of the fund is relatively small ($15 million), the agencies have flexibility in their use of the money to meet local needs.

The PHIP Finance Committee has sorted through a complicated array of grants, categorical restrictions, and diverse funding methods that direct resources into state and local public health activities. This work, reported in detail in the 2000 PHIP, revealed where current financing methods had gone awry. The committee also set forth a set of principles to guide an improved system. In the past year, it has focused on identifying funding methods that would balance spending with system accountability, efficiency, and performance.

The Finance Committee's work is challenging some of the basic assumptions about funding the public health system. For example, if funds are reduced, how is the shared state-local responsibility for public health affected? Which basic services should be

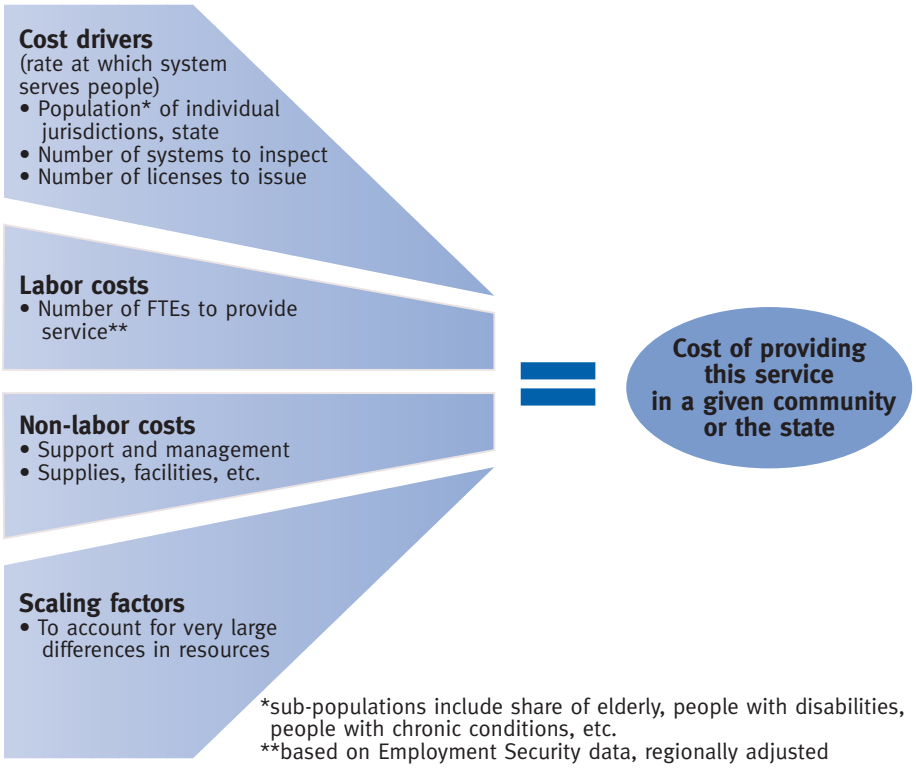
For more information about Financing:

PHIP Public Health Finance Committee Page
http://www.doh.wa.gov/phip/Financing.htm

Institute of Medicine reports:
http://www.nap.edu/books/0309086221/html/

http://www.iom.edu/iom/iomhome.nsf/WFiles/AssuringFINAL/$file/AssuringFINAL.pdf

Calculating the Cost of Providing Public Health Services



The cost model generates calculations that reveal starkly how much public health's declining revenue base has eroded the system's ability to perform public health functions. Statewide, the public health system's $507 million annual expenditure for basic services amounts to only about a third of what the services list and cost model predict the state should be spending.

The committee's future work will be to refine and scale the cost model so that it works well for statewide services and for all health jurisdictions, regardless of size. It will also spell out opportunities for efficiency and joint ventures among partners in the system. And the committee will look for ways to achieve economies of scale that could be brought about through such partnerships.

maintained? Which categorical services should be reduced or eliminated? Can services be both locally responsive and cost-effective? What can be done to address the disparity among local areas in the level of public health services?

To begin to answer these questions, the committee created a detailed list of the state and local public health services that should be available in every community in Washington. They used *Standards for Public Health in Washington State* as a guide and included more than 100 activities, ranging from food safety inspections to immunizations, that most people assume to be part of basic public health services. (See Appendix 5.)

To calculate the true cost of performing these services throughout Washington, the committee created a cost model. For each activity, the cost model identifies *cost drivers*, such as population or the number of facilities to inspect, as well as the labor costs (in full-time equivalent employees, or FTEs) necessary to perform the service. The model also accounts for administrative or non-labor costs as well as the impact of very large or very small public health agencies.

To study the effects of categorical funding, the committee examined how allocations are made for more than 60 separate grants, amounting to about 25% of local public health spending. It determined that allocation formulas are often based on outdated data and assumptions and that new allocation mechanisms are needed to distribute funds more effectively and to meet system performance standards.

Currently, many categorical grants have a separate advisory committee and a funding cycle that is not in synch with other grants. Not surprisingly, the result is a sense of confusion and lack of cohesion. To achieve a simple, clear, and understandable method of allocating funds, the committee is examining ways to integrate fund administration for similar programs, streamline procedures for transferring funds, and combine advisory committees to standardize the criteria used to make funding decisions.

Recommendations for 2003-2005

1. Establish a public health financing system that provides stable and sufficient funding allocated consistently throughout the state.

   All residents of Washington State need and expect a predictable level of public health services. Financing for the system must make effective use of state and local resources and must be allocated so that health protection is sustained in all communities.

2. Adopt a cost model for use throughout the state so that the cost of providing public health services is well documented and can be compared with local and state funding levels. Link costs with related activities for public health improvement, including workforce development and performance standards.

   Cost-modeling work must continue so that the cost of public health protection is documented over time. Cost data are essential for accountability and to examine the effects of categorical grants on general public health programs. The cost model must be linked to *Standards for Public Health in Washington State* to reveal areas of weakness that may need greater investment. Over time, the cost model must expand to account for the contributions of other public agencies and community organizations.

3. Implement and expand the concept of consolidated advisory committees to address funding allocations with the goal of simplifying the allocation process and increasing understanding and acceptance of the allocation methodology.

   Standards for Public Health in Washington State provide a framework that can become a basis for organizing information on the use of public health funding statewide. Combining efforts of many independent advisory committees will create a fuller picture of current activities and spending. While balancing federal and state mandates, it may be possible to integrate funding allocations for greater benefit. In addition, review by broad-based committees will make funding decisions clearly visible to all parties.

Information Technology: Reliable Information for Better Health Programs

Public health officials need rapid access to critical information—lab results, disease reports, birth certificates, accounting records. They all rely on technology to gather information, send it where it is needed, and store it securely.

Technology continues to advance at great speed, and the potential impact on better health is tremendous. Lab tests that once took weeks to complete now take hours. With e-mail, health officials can alert one another immediately about new health threats. With electronically generated spreadsheets, graphs, and geographic information systems, they can analyze vast quantities of data quickly to identify an epidemic or dispel worries.

But the information revolution presents a serious challenge to the public health system. New technology is expensive and complicated, and it requires continuous maintenance. Keeping up with technology has become a necessary burden through all sectors of government. Every purchase decision requires research and review, installation, and training and oversight. Some technologies require local governments—which operate independently from one another and from the state government—to invest in compatible computers, phones, and video equipment.

Training will be crucial. Technology competency will be a growing share of the job for every public health worker. The state government must be prepared to invest in compatible computers, phones, and video equipment.

Protecting access to data represents another challenge to the state's public health system. Data security is both expected and legally mandated. The public health system must establish secure, confidential data transfer capacity as a routine part of business. It will need to purchase data security systems and ensure that employees are trained in the use of systems and data confidentiality protocols.

System-wide investment is essential. This is difficult to achieve because the public health system is highly decentralized, involving 34 separate local government agencies. Without coordinated strategies, the disparity among local agencies will increase, making capacity gaps wider; small, rural health departments, with fewer resources, will likely be left behind. The result will be weaker public health protection overall.

Washington's public health officials have agreed to develop a systematic approach to using technology, applying data, and coordinating resources. The work of the PHIP Information Technology Committee is focusing efforts to give public health

"Public health depends on good information. We're making major improvements in the way we use technology to collect and organize efficient, reliable data."
—Public Health Information and Technology Committee Member Sherri McDonald (Director, Thurston County Public Health and Social Services Department)

Instant Disease Reporting with PHIMS

Imagine filling out one electronic form and sending it off with the click of a mouse rather than struggling with 51 paper forms and figuring out which state public health offices to send them to. That moment has arrived in Washington, thanks to the state Department of Health's new uniform system—the Public Health Issue Management System (PHIMS)—a secure, electronic disease surveillance system designed to streamline public health reporting practices.

Washington state law requires local health jurisdictions to report disease outbreaks or conditions of major public health significance to the Department of Health. PHIMS, a dynamic and adaptable case reporting tool, also supports quality improvement efforts and standards for disease surveillance by prompting—on a disease-specific basis—the correct questions for investigators to ask at the appropriate point in time.

officials, health care providers, policy makers, and citizens throughout Washington the information they need to make healthy decisions. The progress to date includes:

Moving VistaPH to the web

The web-based Vital Statistics for Public Health (VistaPHw) software is a standardized tool for community health assessment, providing more people with access to health data across the Washington State public health system. Assessment staff, health officials, and their partners use this tool to identify their communities' important health issues to set local prevention priorities and guide policy decisions. As a web application, VistaPHw allows for efficient updates of public health data.

Testing and implementing PHIMS statewide

In early 2003, all local health departments will be able to use the Public Health Issue Management System (PHIMS), which recently completed pilot-testing. State and local health departments will use the standard electronic forms to record information when tracking disease outbreaks. Using PHIMS will increase the speed and accuracy of disease reporting and provide a way to identify emerging disease issues (see box, this page).

Conducting a technology inventory

A detailed technology inventory is under way. For the first time, public health officials will know what machines and software are in use across the state. The information will help coordinate purchasing recommendations, target training, and support state-level information technology decisions linked with demonstrated local needs.

Building an electronic data surveillance system

As Washington's public health system acquires new technology, it is building a surveillance system. This step requires long-range planning and coordination across all health care sectors: public health, laboratories, hospitals, providers, and local and state government. Working now to establish common data standards and operating platforms should ensure seamless communication in the future.

For more information about Information Technology:

Public Health Information and Technology Committee Page
http://www.doh.wa.gov/phip/InfoTech.htm

VISTA Public Health Data
http://www.doh.wa.gov/OS/Vista/HOMEPAGE.HTM

Recommendations for 2003-2005

1. Define a basic level of information technology capacity for all health departments.

   To function as an effective system, every local jurisdiction and the state must have basic, compatible technology and the skills to use it. This should include capacity for computer-based surveillance, geographic mapping, and skills to post health alerts on line and analyze data.

2. Assure that the public health workforce has the ability to participate in computer-based training and emergency communication drills.

   Our ability to use technology well—at the moment it is needed—will rest on our level of preparation. Public health officials must be able to use a range of tools, including video, audio, and computer-based technology. Training and testing equipment is an essential part of assuring that we are ready to respond effectively in an emergency.

3. Implement standard data security procedures, install software and equipment, and share protocols for data management and data access system-wide.

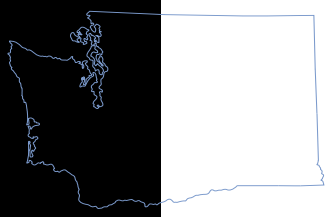
   With the rapid increase in the use of electronic methods to collect, transmit, and store information, data security is increasingly important. Coordinating efforts in this area will promote efficiency and set firm standards for assuring confidentiality and data quality.

4. Develop data standards.

   The quality of information available to public health officials depends on everyone using the same names and definitions for thousands of words and ideas. Achieving this consistency is a complex task and requires sustained attention and evaluation.

5. Continue information technology coordination throughout the public health system, with a focus on investments, connectivity, and development of on-line information technology assessments.

   The technology resources used to support public health efforts need to be maintained statewide, updated regularly, and evaluated on a continuous basis. By coordinating efforts, agencies can save money, assure continuous communication capacity, document gaps, and identify ways to share resources.



Workforce Development: A Statewide Network of Public Health Professionals

The public health workforce is the most important ingredient in the public health system. *People* make public health work. To protect the public's health, the workforce must include an adequate number of people, in the right places around the state, who are well-prepared to do their jobs.

More than 3,500 people work in Washington's 34 local health departments, and about 1,200 work at the state Department of Health. All Washington residents rely on the specialized expertise of these workers when health threats occur—such as the appearance of anthrax in the mail or the first evidence of West Nile virus found in the state. Public health staff are the linchpins that keep the public health system working. They coordinate efforts with thousands more people: in hospitals, clinics, physicians' offices, schools, restaurants, water districts—everywhere work takes place that helps us all lead healthy lives.

The funding crisis in public health is felt most severely in the workforce area. In Washington, public health staff accounts for more than 75% of system expenditures, and staff reductions inevitably translate to reduced services or community protection.

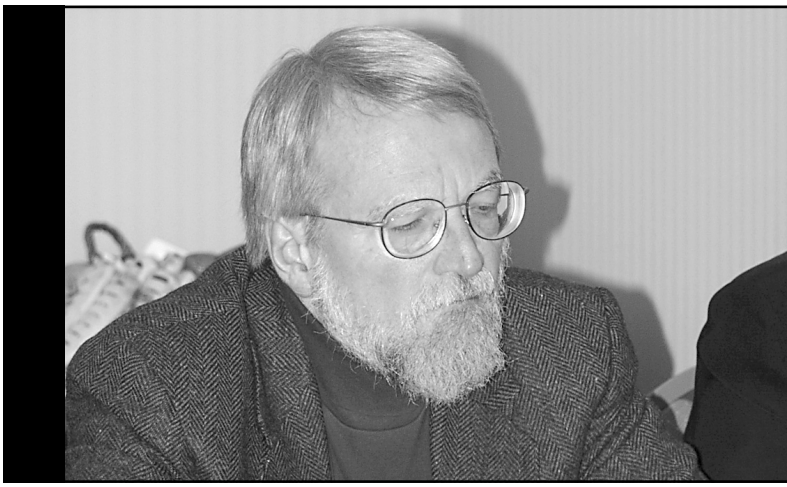
Public health agencies report that they do not have adequate staffing levels. After a series of annual budget reductions, staff are stretched beyond reasonable expectations and are experiencing a sense of looming "burnout."

Budget cuts and consequent staff reductions in Washington's local public health agencies can cause critical services to disappear from large areas of the state—without anyone seeing how thin public health resources have become. Rural areas in particular have difficulty recruiting staff with special expertise or credentials. The fields most affected include nursing, epidemiology, environmental sanitation, and health education.

The PHIP addresses public health workforce development by defining needs statewide—from small rural offices to programs in large urban settings. Prior to the partnership, workforce plans were quite separate from one Washington county to the next. By combining efforts, managers in the state system hope to fill training gaps, share expertise across borders, outline standards for performance, share recruitment efforts, develop retention incentives, pursue diversity, and support career-long learning goals. Among the recent initiatives are:

Defining core competencies

To do their jobs well, public health workers need access to a constantly changing set of health-related facts. They also need certain skills that cut across



"The PHIP has made impressive progress in identifying public health workforce needs across the state and developing strategies for recruitment and training."
—Workforce Development Committee Co-chair Jack Thompson (Director, University of Washington Northwest Center for Public Health Practice)

individual disciplines, such as understanding the "population-based" approach that is fundamental to public health protection. The PHIP has developed a framework for describing the skills that go beyond discipline-specific education and are critically important to achieving the PHIP vision elements and state standards (see Appendix 6).

Mapping the workforce

While we know the number of public health workers overall, we do not have an adequate description of the types of workers, the qualifications they hold, and where they work. Washington's focus on emergency preparedness has made clear the need to measure and monitor the workforce so that officials know where they can access specific skills on short notice. As part of the state's bioterrorism planning, the Department of Health and the University of Washington will collect workforce information that maps Washington's public health capacity.

Expanding diversity

Our communities are diverse, with people of different races, ethnic backgrounds, and language groups. The public health workforce needs to reflect that diversity. To achieve this, we will need a concerted outreach to young people from diverse backgrounds to encourage them to pursue a broad range of health sciences education that includes nursing, medicine, pharmacy, social work, and biostatistics.

Developing a training network and learning management system

Washington is part of a six-state training network organized by the University of Washington Northwest Center for Public Health Practice. Washington has also put in place a system to allow workers to register on-line to receive training for specific programs using such methods as audio and video conferences, including satellite downlinks as well as classroom-style workshops. Last year, the training network served 2,345 participants through 45 broadcasts on topics ranging from smallpox to health disparity issues.

Building emergency response capacity

The training network is part of Washington's emergency response system. On September 11, 2001, the state arranged a satellite downlink to a location in every county that could be activated with a few hours notice. While it was not needed, it was reassuring to know that the broadcast system could swiftly link public health officials and hospitals with the U.S. Centers for Disease Control and Prevention.

Leadership development

A six-state Public Health Leadership Institute will begin its inaugural year in January 2003, sponsored by the University of Washington Northwest Center for Public Health Practice. The program selects participants from state and local public health roles in each state, along with members of community-based organizations. The institute offers a curriculum to help public health managers hone their skills in communication, leadership, policy development, and administration.

Bringing local policy makers together

Local Boards of Health, composed of elected and appointed officials from throughout Washington, now have the opportunity to meet each year to discuss issues that are commonly confronted at the local level.

The PHIP workforce development activity has a broader focus than "training." The goal is to establish and support "learning systems" that workers use continuously. Public health workers must keep up with developments in their field, such as new diseases, new techniques for treatment, and new technologies for environmental protection. Strong learning systems are needed to support the workers who must respond to them so that they can easily get current, credible information when they need it most.

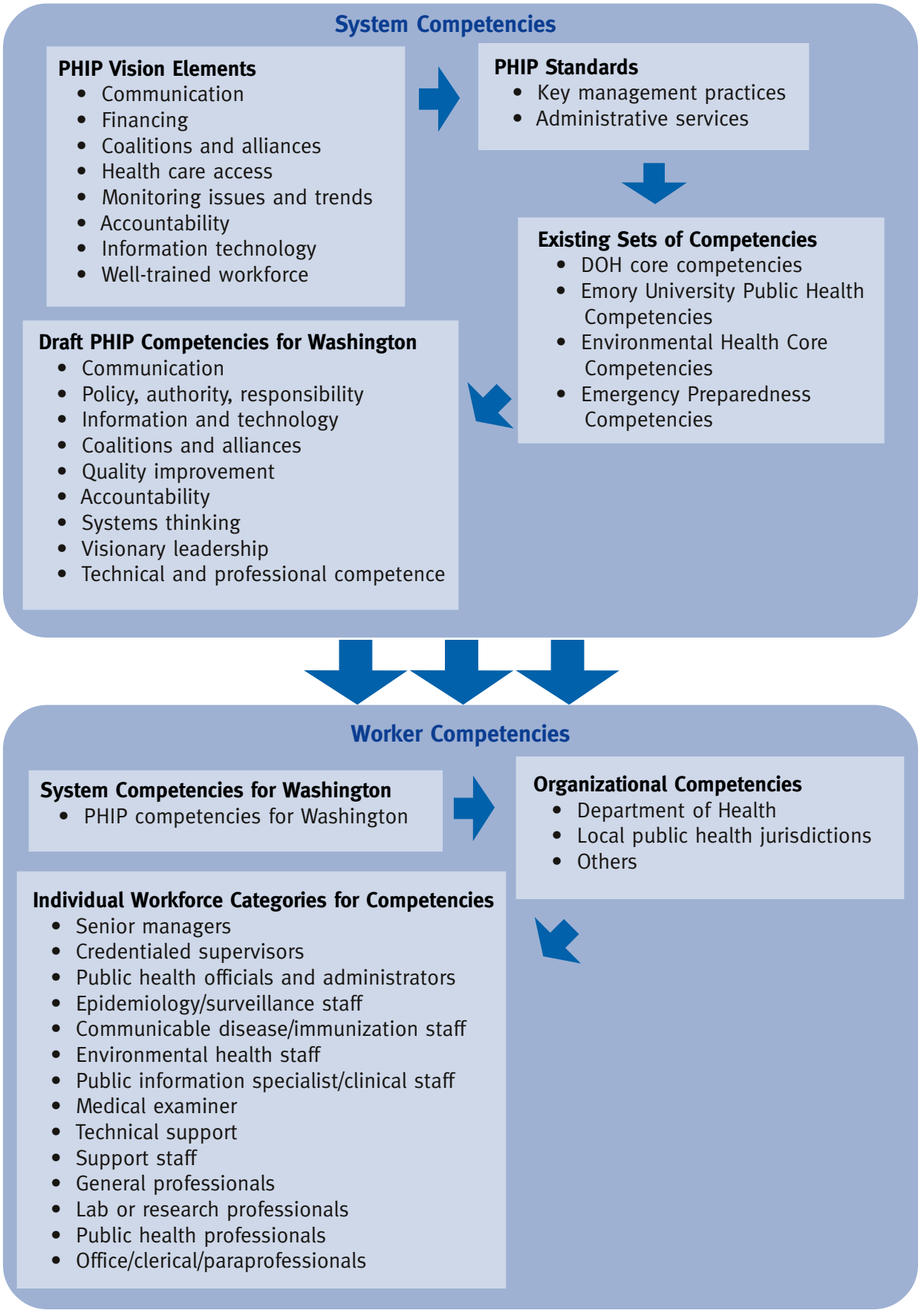
For more information on Workforce Development:

Washington Public Health Training Network
http://www.doh.wa.gov/waphtn/

PHIP Workforce Development Committee Page
http://www.doh.wa.gov/php/WorkforceDevelopment.htm

Northwest Center for Public Health Practice
http://healthlinks.washington.edu/nwcphp/

PHIP Public Health Competencies Model



Recommendations for 2003-2005

1. Complete a descriptive census of the public health workforce to document the size and range of workers available today and to identify training needs.

   Effective workforce planning requires that we have basic information about today's workforce—its size, range of professional expertise, and distribution of basic capacity.

2. Adopt a set of expected worker competencies, linked to *Standards for Public Health in Washington State*, as the basis for developing training programs, college course curricula, performance measurement, and other aspects of public health workforce development processes.

   Public health workers who are well-prepared to meet the challenges of today and tomorrow must have a thorough understanding of public health—in addition to the specific discipline for which they have been trained (e.g., medicine and biology). The use of a standard set of competencies will facilitate coordinated training and development efforts.

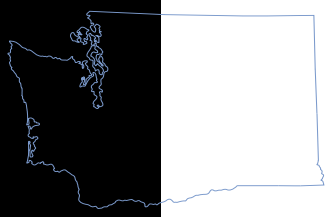
3. Develop a training system that links expected competencies with learning opportunities, tracks training data, and provides maximum flexibility in helping people obtain the information they need to perform their work.

   Today's workers need continuous access to information that changes rapidly. They never stop learning, and they must become adept at finding information quickly. They must be able to rely on a range of sources, drawing from computers, video, print, and on-line literature, and real-time consultation with colleagues in neighboring counties—or countries.

4. Collect and distribute exemplary practices for increasing public health workforce diversity.

   The composition of the public health workforce should reflect the communities served. Community-based efforts to recruit and train a diverse workforce will have long-term impact.

5. Pursue strategies that address leadership development and systematic incentives for workforce development such as establishing credentials for public health workers.



Access to Critical Health Services: Programs Essential for Improving Health

One area addressed by *Standards for Public Health in Washington State*—and a core function of public health agencies throughout the country—is helping people get the services they need. During the 1990s, a thriving state economy helped expand access to health care. By 2000, 86% of Washington residents reported that they had a regular source of primary health care, and only 8% lacked health insurance, according to *The Health of Washington State.*

Today, the trend is reversing. Washington's economy is struggling. Health costs—driven by such factors as an aging population, expensive medical interventions, and the rising costs of pharmaceuticals—are increasing at a rate of more than 7% a year. Rising costs pressure employers to reduce benefits and pass along higher costs to employees. Government, which covers a large percentage of health costs for its own employees, people with low incomes, and people with disabilities, must cut services and the number of people eligible for help as revenues decline. Health care providers, themselves faced with rising costs and decreased payments for services, have trouble covering both wages and benefits for their employees.

The result is that people who need health services will have a much harder time obtaining them. In some cases, services simply will not be available. The problem of access to care has many aspects: a child doesn't get in to see a dentist, a pregnant woman can't obtain pre-natal care, an older person lacks the guidance needed to control diabetes. The problems of access confronting Washington residents are described in detail in a report by the State Board of Health.

Some people mistakenly believe that public health departments are a substitute for medical care services. They are not. Medical care is provided to individual people experiencing illness. Public health departments provide services to entire populations, such as keeping drinking water supplies safe or tracking down an epidemic. Occasionally, public health work includes providing medical services to people, but these cases are very limited and are linked to public health implications. For example, many health departments provide immunizations directly, but they also distribute vaccine to local physicians so that more people can be immunized through their combined efforts.

What health departments *can* do about health care access falls into the realm of planning, assessing resources, community organizing, and making referrals for individual clients. To perform this important work, public health agencies need clear guidelines about what services people need. During 2001, the State Board of Health finalized and

Don Sloma (State Board of Health Executive Director) and Tom Locke (SBOH member and Health Officer for Clallam and Jefferson counties) discuss the growing health crisis for Washington residents caused by deteriorating access to affordable medical care.

published a Menu of Critical Health Services (see Appendix 7). These are services the Board deems "essential to the health of the community at large" and that should be available in every community.

The Menu is being incorporated into state health policy and public health initiatives. For example, it is a component of Governor Locke's state health report, as well as local projects such as the CHOICE student cancer prevention initiative and the federal 100% Access Project. Medical directors are using the Menu to establish guidelines for children's clinical preventive services. Gradually, more health policy makers in Washington are becoming aware of the Menu and using it for budget and policy development.

Currently, there is no way to measure the degree to which services on the Menu are available. The State Board of Health found that there are not sufficient data about any areas of service to describe access at the community level. The limited data that do exist about services are primarily state level, which does not help identify local service gaps.

The work on access is taking on new importance in the looming health care crisis. As more residents lose access to privately financed health care, they will turn to public health agencies to locate services or to provide them. And the ability of agencies to respond will depend on progress in other areas of the Public Health Improvement Partnership: the availability of adequate financing, a skilled workforce, reliable information systems, and public health agencies that are equipped to meet performance standards.

For more information about Access:

PHIP Access to Critical Health Services Committee Page
http://www.doh.wa.gov/php/Access.htm

2002 Washington State Health Report
http://www.doh.wa.gov/SBOH/Pubs/2002SHR.pdf

SBOH Report:
http://www.doh.wa.gov/SBOH/Priorities/access/AccessStatus.pdf

Recommendations for 2003-2005

1. Establish a Committee on Access to Critical Health Services to guide use of *Standards for Public Health in Washington State* on access.

   Public health leaders and their partners will benefit from having a sustained forum on access, focusing on the public health role in understanding a community's capacity to meet health service needs. So much attention has been framed from the perspective of health insurance coverage that basic information is often lacking on such issues as who has access to what services, which services are missing and where, and what it would take—in terms of providers, dollars, and facilities—to fill the gap.

2. Expand, update, and improve the Menu of Critical Health Services and involve public health, private providers, and purchasing groups in using the Menu to guide decisions about health services.

   The Menu of Critical Health Services can provide a systematic way for everyone involved in health care delivery to look at what they have and what they need to meet basic expectations of services. By working from a common list, gaps in services will be easier to identify and address. In some areas, such as environmental health protection, the list of services should be expanded.

3. Promote "exemplary practices" associated with the access standard for public health.

   The standards baseline study yielded valuable examples of work that can help a community address health care access issues. The State Board of Health report on access makes many recommendations on actions that will improve access and benefit communities.

Effective Communication: Always Working for a Safer and Healthier Washington

"Public health" is something everyone counts on but seldom stops to think about—until something goes wrong. When a drinking water system fails, the importance of clean water is suddenly apparent. When a new disease emerges—such as West Nile virus—it becomes clear that we need public health expertise to monitor, track, diagnose, and advise.

According to research conducted during 2001 for the PHIP, few people use the term "public health" when discussing health-related issues, yet they count on public health agencies to protect them from dangers that are beyond their control, including communicable diseases and unsafe food and water. The Washington research also revealed that people rely on *local* public health agencies and like knowing that their county health department is part of a larger network of public health agencies working together to perform this function.

One danger in taking public health for granted is that we may neglect or dismantle the system that ensures our quality of life. By the time we notice the consequences of this neglect, rebuilding the system would be difficult and expensive. For this reason, it is important that Washington residents understand how public health affects their lives every day. It is also important for them to see how they can play a role in improving the public's health, by promoting community projects, supporting health improvement goals, and actively participating in public health policy debates.

The PHIP is developing a communication process to describe public health. Its Communications Committee commissioned the 2001 research and is using the findings to inform an evidence-based Communications Plan for use by officials and agencies. The plan has four broad goals:

- To help public health agencies define and convey what they do.
- To build a unified, statewide perception of what public health agencies are.
- To provide tools that public health agencies can use to communicate consistently throughout their programs, products, and services.
- To inform planning and decisions.

The overall purpose of this work is to convey consistent messages about public health. The Communications Plan uses an "identity platform" to ensure that public communications step back from scientific technical terms and instead use words and phrases that people can easily understand and use for good decision-making about their

"People need to understand the importance of public health and the impact that health promotion and disease prevention can have on our lives."
—Communications Committee Co-chair Kay Koontz (Director, Southwest Washington Health District)

health and their community's health. Toward this goal, the committee's work translates the sometimes scientific language that public health professionals use with each other into concepts and terms that carry meaning for different audiences, including the general public, the business community, elected officials, and the news media. For example, the broad public health mission of protecting communities from harm and promoting healthy behaviors has been stated as:

Always working for a safer and healthier Washington.

And the elements of this work—conducting health promotion programs, collecting data to assess and monitor community health, and regulating restaurants and water and other systems—are described as:

Essential programs for improving health

Information that works

Protecting you and your family every day

The 2001 research also identified phrases that public health workers would best avoid—phrases that are paternalistic, bureaucratic, overly scientific, and that suggest public health activities occur invisibly or "behind the scenes."

For more information about Communication:

PHIP Communications Committee Page
http://www.doh.wa.gov/phip/Communications.htm

H.E.R.E in Washington, Health Education Resource Exchange
http://www.doh.wa.gov/here/

Local agencies will receive public information kits with tools such as PowerPoint presentations and public service announcements, artwork, and advice on working with reporters. The Communications Plan calls for statewide training for Washington's public health workforce to become comfortable and proficient with the identity platform's elements so they can use them in their communities.

Over time, the Communications Committee will evaluate the outcomes of the plan by methods such as monitoring stories in the news media, surveying public health officials, and in a few years, repeating research about consumer perceptions and the system that is "always working for a safer and healthier Washington."

Communication tools include basic materials that can be tailored to local public health agencies.

Recommendations for 2003-2005

1. Prepare public health workers and community partners to describe the business of public health agencies and how they work to protect and improve the health of people. Accomplish this by providing training, materials, and continuing communications support.

   Research has demonstrated that the public places high value on public health services but may not understand exactly how these services are provided and supported within every community. Coordinated training and tools will help public health workers and their partners improve understanding of the important work of public health.

2. Assure that all public health agencies are prepared to carry out effective communications when responding to public health emergencies and local issues of concern.

   Clear, swift communication is vital when a community faces a public health threat of any kind. Agencies must have requisite skills on tap or know how to access them by arrangement. Coordination across agencies is essential to reduce wasted effort and assure that messages stay clear and consistent.

Appendices

Appendix 1: Washington's Local Public Health Jurisdictions, 2002

Adams County Health District

Asotin County Health District

Benton-Franklin Health District

Chelan-Douglas Health District

Clallam County Department of Health and Human Services

Columbia County Public Health District

Cowlitz County Health Department

Garfield County Health District

Grant County Health District

Grays Harbor County Public Health and Social Services Department

Island County Health Department

Jefferson County Health and Human Services

Kitsap County Health District

Kittitas County Health Department

Klickitat County Health Department

Lewis County Public Health

Lincoln County Health Department

Mason County Department of Health Services

Northeast Tri-County Health District

Okanogan County Health District

Pacific County Health and Human Services Department

Public Health—Seattle and King County

San Juan County Department of Health and Community Services

Skagit County Department of Health

Snohomish Health District

Southwest Washington Health District

Spokane Regional Health District

Tacoma-Pierce County Health Department

Thurston County Public Health and Social Services Department

Wahkiakum County Department of Health and Human Services

Walla Walla County Health Department

Whatcom County Health Department

Whitman County Health Department

Yakima Health District

Appendix 2: PHIP Committees

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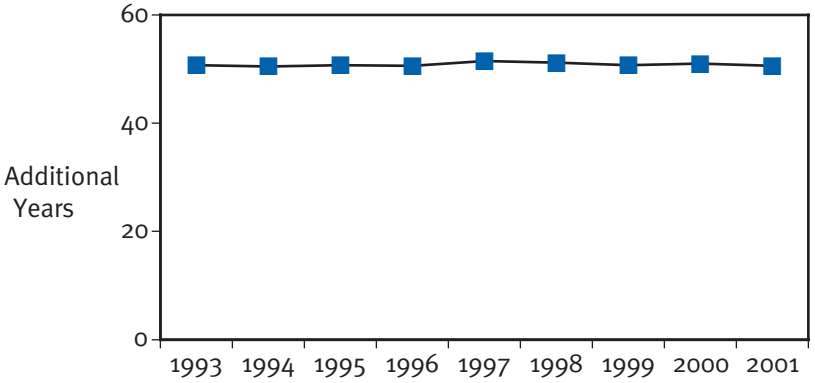
Appendix 3: State Report Card Data

For more information on the definitions used for these indicators, please see "Technical Notes, Data Definitions, and Data Sources," beginning on page 55.

General Health

Years of Healthy Life

A 20 year-old Washington resident can expect about 50 additional years of healthy life.

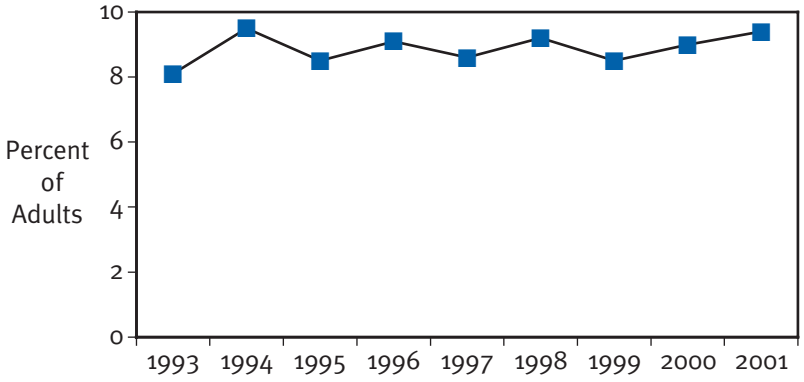


Source: Washington State Death Certificate and BRFSS
Prepared by DOH Office of Epidemiology

Many people value a high quality of life that includes good physical health. In spite of medical advances, overall the number of years of healthy life that can be expected by a 20 year-old has not changed since 1993, although men gained 1 additional year. A 20 year-old woman can expect an additional 53 years of healthy life, while a 20 year-old man can expect 49 additional years.

Emotional Well-being

Almost 1 in 10 adults in Washington report 14 or more days of poor mental health in the past month.



Source: BRFSS
Prepared by DOH Center for Health Statistics

The percent of people reporting 14 or more days of poor mental health has been constant since it was first measured in 1993.

Healthy Child Development

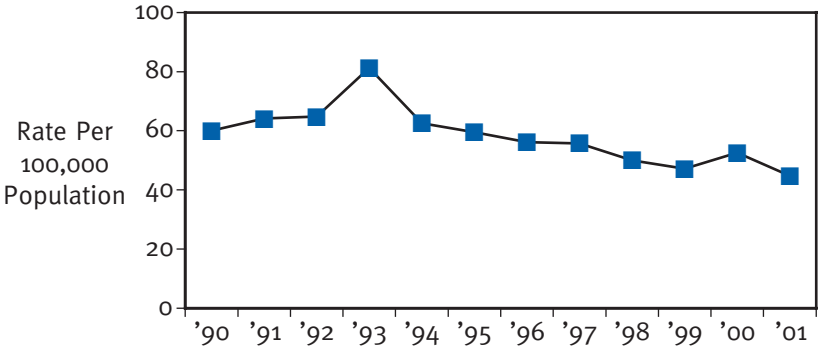
Early childhood development programs, such as programs that help children get ready for school, have been shown to have long-lasting benefits for health and health-related factors. Success in kindergarten, demonstrated by moving into first grade at the end of the school year, is one indication that children are ready for school. The Office of Superintendent of Public Instruction expects to have information on the number of children repeating kindergarten in 2005.

How Safe and Supportive Are Our Surroundings?

How Safe Are Our Food, Water, and Air?

Illnesses Associated with Unsafe Food, Unsafe Water, or Poor Hygiene

With a rate of almost 45 per 100,000, there were about 2,700 reports of illnesses due to unsafe food, unsafe water, or poor hygiene in 2001.



Source: Communicable Disease Database
Prepared by DOH Office of Epidemiology

The annual rate of illness due to unsafe food, unsafe water, or poor hygiene is influenced by the year-to-year variability in rates for specific diseases, which can vary due to many factors, including large multi-state outbreaks. Overall, the rate of illness associated with unsafe food, unsafe water, or poor hygiene has been decreasing.

Safe Drinking Water

Most of Washington's large water systems meet standards for nitrates and coliform.

More than five million people in Washington live in residences served by public water systems that have more than 14 connections or serve more than 24 people (Group A systems). From July 2001 through June 2002, about 62% of these systems, serving approximately 53% of this population, completed testing for nitrates and coliform bacteria and did not exceed allowable levels of these substances. The 38% of systems that did not meet these criteria are not necessarily providing poor quality water. Most systems did some testing even though they did not test as often as required. Approximately 98% of the systems, serving about 92% of this population, did some testing and did not exceed allowable levels of nitrates or coliform bacteria.

Source: Drinking Water Automated Information Network
Prepared by DOH Division of Drinking Water

Air Quality

The percent of people exposed to air pollution at levels that exceed the national outdoor air quality standards decreased substantially over the 1990s.

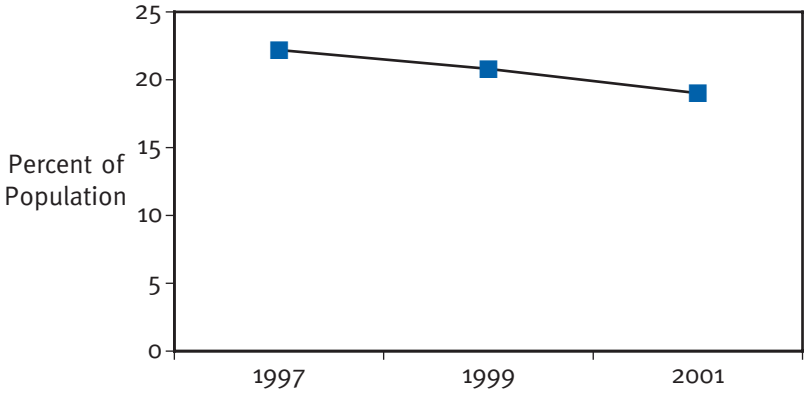
By 2002, no Washington resident was exposed to levels of the six air pollutants covered in the Clean Air Act in excess of the levels allowed by the national standards. The national standards are designed to protect against most adverse health impacts, but not all. Health impacts occur at levels below the standards, especially for sensitive populations. Determining how many residents might be affected is complicated by a lack of known thresholds for some pollutants and resource constraints on monitoring and evaluating air pollution data. Additionally, national standards do not exist for many air pollutants. Recent data indicate that a large proportion of Washington's population faces health risks from pollutants other than the six traditional air pollutants. Air pollution from motor vehicles, especially diesel engines, continues to be a concern.

How Safe and Supportive Are Our Communities?

Economic

Percent Below Poverty Level

In 2001, 1 in 5 Washington households had incomes indicating poverty or risk of poverty.



Source: Washington State Population Survey
State Office of Financial Management

In general, people with higher incomes enjoy better health than people with lower incomes. Stress, difficulty adopting healthy lifestyles, and lack of access to medical care are some of the factors that contribute to this phenomenon. In 2000, the federal poverty level for a household of four people was an annual income of $17,050. But people in households with higher incomes may effectively be living in poverty as well. This Report Card uses double the federal poverty level (annual income of $34,100 for a household of four) as an indicator of poverty or risk for poverty.

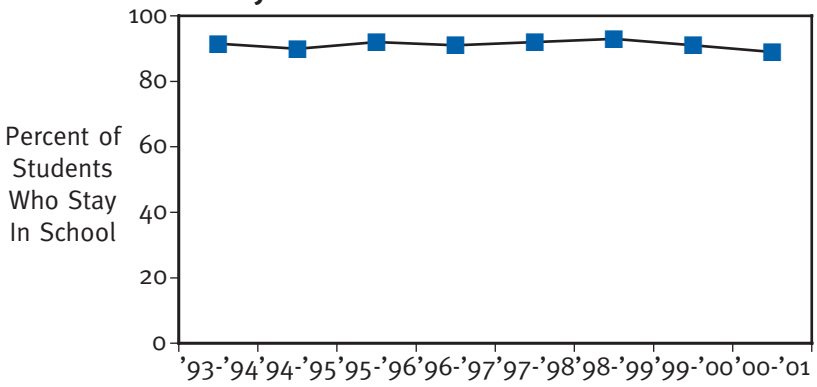
Social Connectedness

Civic Involvement and Interpersonal Trust

People living in communities with high levels of civic involvement and interpersonal trust are healthier than people in communities with low levels of these factors, but the reason for this is not certain. Income disparity could play a role, since communities with large income gaps between the rich and poor often have lower levels of civic involvement and interpersonal trust. Infrastructure supporting health and healthy lifestyles could also play a role, since communities with low levels of civic involvement and interpersonal trust often do not invest in parks, schools, affordable housing, clinics, libraries, and other infrastructure. Compared to other states, Washington residents report relatively high levels of interpersonal trust and civic involvement. More complete information on civic involvement and interpersonal trust in Washington will be available in 2003.

High School Retention Rate

Each year, about 9 out of 10 high school students in Washington stay in their school for the entire year or they transfer to other schools.



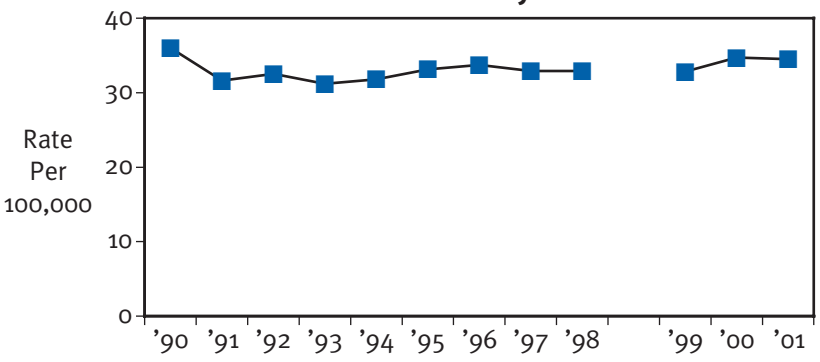
Source: Office of Superintendent of Public Instruction

People with higher levels of education have better health. Of about 10% of students who do not stay in school, about half drop out each year while the status of the other half is unknown. They may have dropped out or they may have gone elsewhere without formally requesting a transfer. The percentage of students who stay in school has been constant for nearly a decade. Estimates of the overall graduation rate in Washington range from about 70% to 80%.

Injuries and Violence

Unintentional Injury

With a death rate of nearly 35 per 100,000, unintentional injury causes about 1 in 20 deaths each year.*



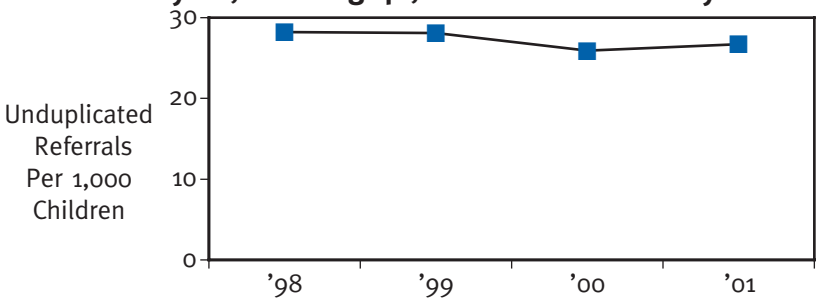
*Coding of death was changed between 1998 and 1999.

Source: Washington State Death Certificate Data

While the overall death rate for injury shows little change, changes are evident for certain types of injury. During the past decade, the motor vehicle death rate declined substantially due to increases in the use of occupant protection devices, efforts to discourage drunk driving, more safety features in cars, and highway engineering improvements. Poisoning death rates, however, increased, with most of the increase attributed to use of drugs or misuse of prescription drugs.

Child Abuse and Neglect

More than 25 of every 1,000 children in Washington are involved in investigations* for child abuse or neglect each year, affecting 40,000 children annually.



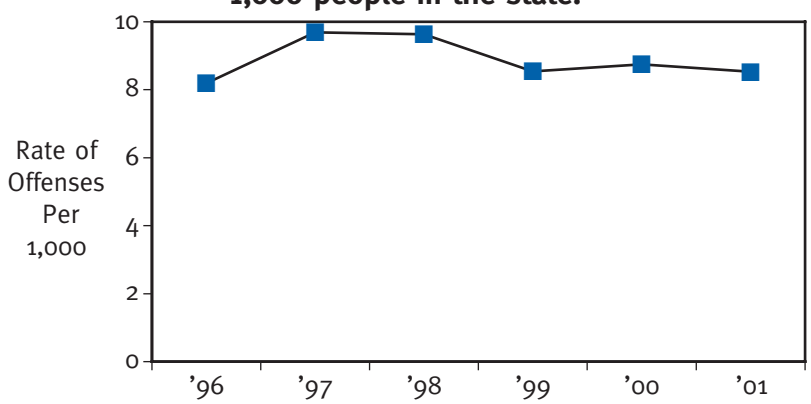
*By Department of Social and Health Services Children's Administration

Source: Children's Administration, Department of Social and Health Services

Child maltreatment causes immediate suffering of the child and often has long-term effects on physical and emotional well-being. Children who have been abused or neglected are at increased risk for delinquency, substance abuse, adolescent pregnancy, suicide attempts, and HIV-risk behaviors. Washington's rate is similar to that reported nationally.

Domestic Violence

Since 1996, domestic violence offenses have occurred in Washington at the rate of 8-10 offenses for every 1,000 people in the state.

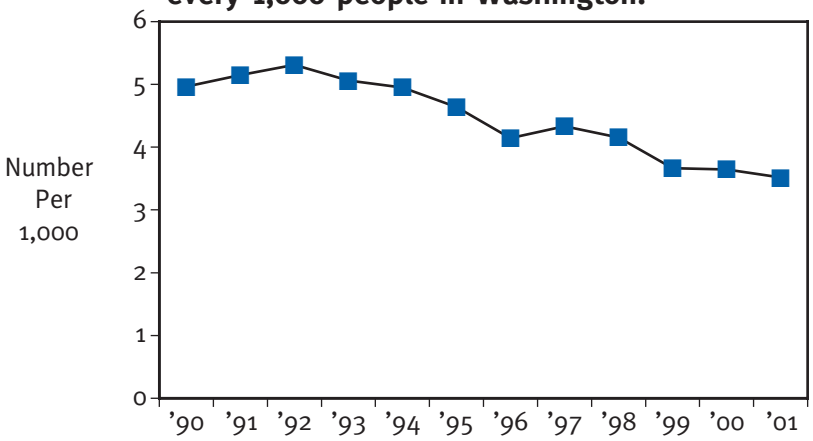


Source: Washington State Association of Sheriffs and Police Chiefs

One in five Washington women reports being injured by domestic violence sometime in her lifetime; in some cases, domestic violence even leads to death. Domestic violence is also associated with impaired social, emotional, and cognitive development of children who are witnesses, and, at least for boys, with perpetuating violence in the next generation. The annual rate of domestic violence-related offenses has not changed substantially since 1996.

Serious Violent Crime

In 2001, about 3.5 serious violent crimes occurred for every 1,000 people in Washington.



Source: Washington State Association of Sheriffs and Police Chiefs

Serious violent crimes include murder, rape, robbery, and aggravated assault. Nationally, rates of violent crime have declined since 1994. The national rate for 2001 was the lowest level recorded since monitoring began in 1973. Violent crime has also been decreasing in Washington.

How Supportive is Our Health Care System?

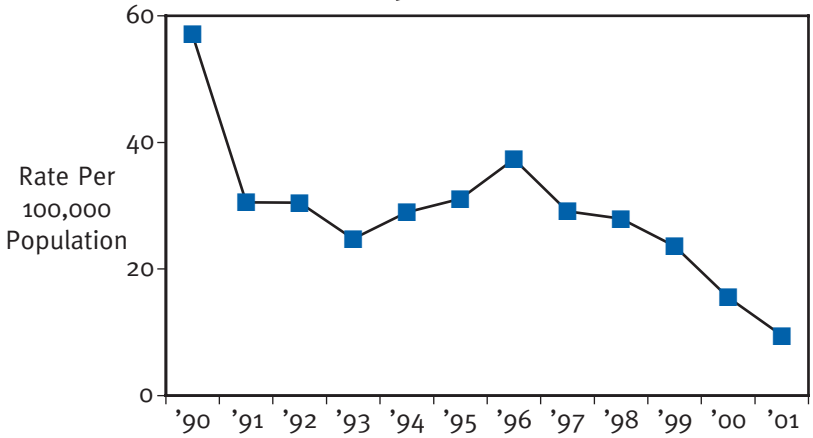
Access to Health Care

In 2001, 1 in 6 households in Washington reported that they were unable to obtain or experienced difficulty or delay in accessing health care.

The major reasons people report unmet health care needs nationally are lack of insurance, under-insurance, other insurance-related factors, unavailability of specialists or appropriate referrals, and transportation-related issues. In Washington, adults lacking health insurance coverage for a full or partial year are four to five times more likely to report unmet health care needs compared to those with insurance for the full year. Among adults who had insurance for the entire year, 11% reported unmet health care needs. Other factors that need to be considered include cultural context and providing the same quality of health care regardless of race, ethnicity, or socio-economic position.

Vaccine-preventable Disease

Rates of Vaccine-preventable Disease



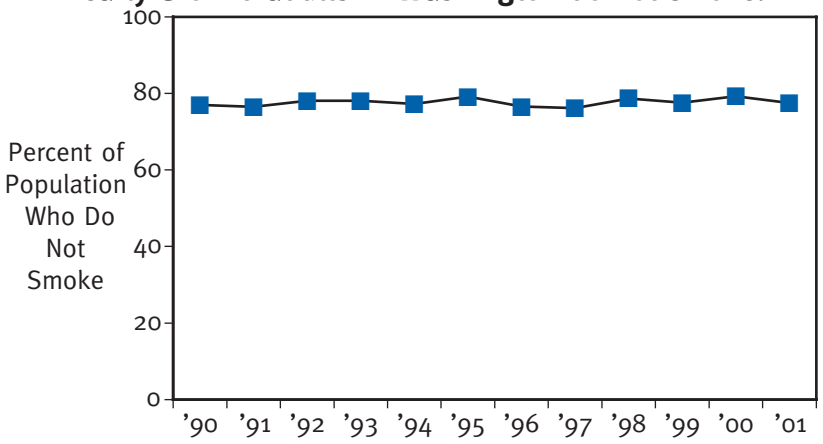
Source: Communicable Disease Database
Prepared by DOH Office of Epidemiology

Rates for Hepatitis A and B, measles, mumps, and *Haemophilus influenzae* have dropped since 1990, while rates for pertussis show considerable year-to-year variation and may be increasing. Occasional measles outbreaks occur with up to several dozen cases. Rates for polio (vaccine-associated), rubella, and tetanus have remained very low since 1990.

How Healthy Are Our Behaviors?

Do we smoke cigarettes?

Nearly 8 of 10 adults in Washington do not smoke.



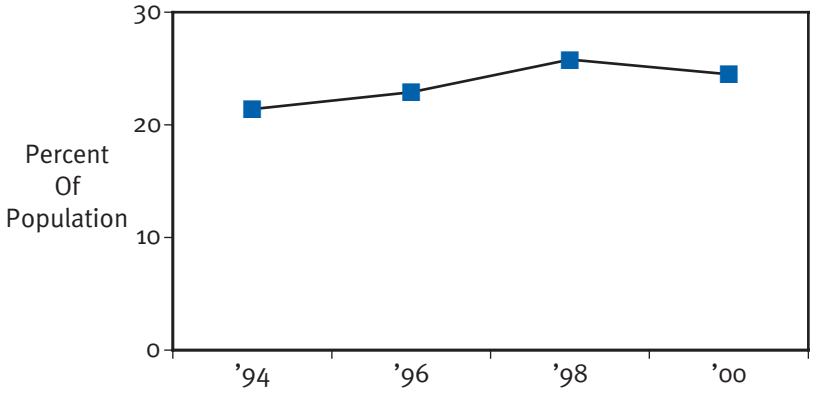
Source: BRFSS
Prepared by DOH Office of Community Wellness and Prevention

The percent of adults who do not smoke has remained steady since 1990, despite increasing knowledge that tobacco is harmful. About one in five deaths in Washington can be attributed to tobacco use.

Among youth, cigarette smoking within the past 30 days increased during the early 1990s and has remained constant since then. In 2000, about 20% of 10th-graders and nearly 30% of 12th-graders reported smoking.

Do we eat fruits and vegetables?

About a fourth of Washington adults eat fruits and vegetables about five times each day.



Source: BRFSS
Prepared by DOH Office of Epidemiology

Eating at least five servings of fruits and vegetables each day is good for your health. But we cannot measure "servings" directly. For 1994-2000, about a fourth of Washington residents report eating fruits and vegetables five *times* a day. But DOH estimates that about half of Washington adults eat at least five *servings* of fruits and vegetables each day. Only about 23% of high school students report eating fruits or vegetables five times daily.

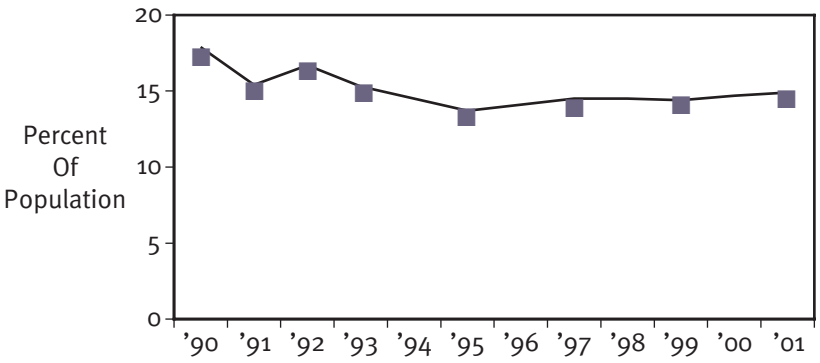
Are we physically active?

In 2001, nearly two-thirds of Washington adults reported that they met the recommendations for vigorous or moderate physical activity during their work or leisure time.

Health benefits from being physically active include reducing the occurrence and/or negative impacts of heart disease, high blood pressure, colon cancer, Type 2 diabetes, falls and fractures, obesity, osteoarthritis, depression, and anxiety. Physical activity is difficult to measure. Prior to 2001, a different set of questions found that about half met the recommendations. It is not clear which measure more accurately depicts physical activity in Washington. The proportion of adults who report meeting recommendations for physical activity during leisure time has changed little since 1987.

Do we abuse alcohol?

Since 1995, approximately 1 in 7 adults in Washington reports drinking 5 or more alcoholic beverages on one occasion, at least once in the past month.



Source: BRFSS
Prepared by DOH Office of Epidemiology

The negative health effects of alcohol, such as liver disease, some cancers, trauma, and impaired fetal development, are associated with greater quantities and duration of use. Drinking five or more alcoholic beverages on one occasion is indicative of heavy drinking. The percent of adults reporting drinking five or more alcoholic beverages on one occasion decreased from 1990-95 and has since remained stable. Decreases in rates of alcohol-related traffic crashes and in deaths from cirrhosis of the liver are consistent with a reduction in heavy drinking. In contrast, the rate of drug-related deaths has been increasing, but there are still fewer drug-related deaths than deaths related to alcohol.

Technical Notes, Data Definitions, and Data Sources For the Key Health Indicators

Technical notes

Age-adjustment

Rates of disease and factors associated with disease generally vary by age. For example, heart disease and cancer increase as people age. Health data are often adjusted for age to allow comparisons between two or more populations independent of their age structures. For simplicity, we did not adjust the data in this appendix for age. Because the most common age-adjustment standard is the 2000 U.S. standard population and because Washington's current population is similar to that standard, age-adjustment does not substantively change any of the rates or percents reported in this appendix. Nonetheless, the reader should exercise caution when comparing these rates and percentages to those from other sources. Additional information on age-adjustment can be found at http://www.doh.wa.gov/Data/Guidelines/Rateguide.htm.

Confidence intervals

A confidence interval is a range of values that is normally used to describe the uncertainty or variability around a rate or percent. It is especially important to know the variability around a rate or percent when the variability is relatively large and when comparing rates or percents, such as between two populations or two different years. Confidence intervals are commonly reported as plus or minus a certain amount. For simplicity, we did not include confidence intervals for the data presented in this appendix. The variability is relatively small for most of the data presented (e.g., plus or minus 1 or 2 percent). We also discussed the findings in a manner intended to remind the reader that the data are estimates with some variability. For example, in discussing fruit and vegetable consumption, we say "Only about a fourth of Washington residents eat fruits and vegetables at least five times each day," rather than giving an exact percent with a confidence interval. Providing annual data allows the reader to see the amount of year-to-year variability. If the yearly estimates bounce up and down, as in the chart on Emotional Well-being, the annual fluctuations are most likely due

to chance and would be described by the use of confidence intervals. Additional information on confidence intervals is available at http://www.doh.wa.gov/Data/Guidelines/ConfIntguide.htm.

Tests of trend

We use tests of trend to determine whether rates and frequencies are increasing, decreasing, or staying the same over time. For the data in this appendix, we used the "joinpoint" methodology developed by the National Cancer Institute. Information on this method is available at http://srab.cancer.gov/joinpoint.

General Health Status

Years of healthy life

"Years of healthy life" is calculated by adjusting life expectancy derived from death certificate data with health status measured by the Behavioral Risk Factor Surveillance System (BRFSS) question, "Would you say your health in general is excellent, very good, good, fair, or poor?" The method used is described in U.S. Centers for Disease Control and Prevention, National Center for Health Statistics (CDC-NCHS) Statistical Notes, Number 21, August 2001. The method is slightly modified because the measure of health status is available only for people age 18 and older. Thus, we calculate years of healthy life (referred to as "healthy life expectancy" in the CDC-NCHS report) as the number of additional years a 20 year-old is expected to live in good, very good, or excellent health. Information on the death certificate and BRFSS is available at http://www.doh.wa.gov/HWS/doc/AppendixB.doc.

Emotional well-being

The indicator for emotional well-being is frequent mental distress, measured by the percent of people reporting 14 or more days in response to the BRFSS question, "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" Additional information on BRFSS is available at http://www.doh.wa.gov/HWS/doc/AppendixB.doc.

Healthy child development

The indicator for healthy child development is a child's readiness to learn when he or she enters kindergarten. Readiness to learn includes both cognitive and social functioning. Repeating kindergarten is one indication that a child was not ready to learn when entering kindergarten. The state Office of Superintendent of Public Instruction expects to have information on the percent of children repeating kindergarten beginning in 2005 for the 2003-04 school year.

How safe and supportive are our surroundings?

How safe are our food, water, and air?

Illnesses commonly associated with unsafe food, unsafe water, or poor hygiene

Many pathogens can be spread through contaminated water or food, or through poor hygiene, such as when a food preparer does not wash his hands after using the lavatory. The Washington Administrative Code (WAC) 246-101 requires that health care providers, hospitals, and/or laboratories report diseases of public health importance to state or local public health officials. These reports are compiled at the state level and become part of the Infectious Disease Reporting System. This indicator is measured by the number of reported cases of the following diseases per 100,000 persons:

- Acute viral gastroenteritis
- Campylobacteriosis
- E. coli O157:H7 infection or hemolytic uremic syndrome
- Giardiasis
- Listeriosis
- Salmonellosis
- Shigellosis
- Vibriosis (non-cholera)
- Yersiniosis

Additional information on the Infectious Disease Reporting System is available at http://www.doh.wa.gov/HWS/doc/AppendixB.doc. Population data needed to calculate rates is developed by the state Office of Financial Management and available at http://www.ofm.wa.gov/pop/index.htm#est.

Safe drinking water

To assure safe drinking water, water systems must test water and the water must be clean. The Report Card indicator for safe drinking water is the percent of the population that receive their water from a Group A system that has completed all required testing, does not have E. coli or fecal coliforms in the water, and has nitrate levels that are below 10 parts per million. Group A systems are public water supplies that have more than 14 connections or serve 25 or more people each day. Water systems provide information on testing to the Washington State Department of Health Division of Drinking Water. The Department compiles this information into the Drinking Water Automated Information Network (DWAIN). Population served is estimated from the number of connections. A data system capturing information for smaller public water systems (Group B) and for contaminants in addition to coliform bacteria and nitrates is under development.

Air quality

One indicator of air quality is whether areas meet the National Ambient Air Quality Standards (NAAQS). NAAQS include particulate matter (PM10), carbon monoxide (CO), ground-level ozone (O_3), nitrogen dioxide, sulfur dioxide, and lead. In Washington State, we currently monitor PM10, CO, and O_3. Monitoring for nitrogen dioxide, sulfur dioxide, and lead is not required in Washington because levels of these pollutants have not exceeded national standards for many years. This indicator provides the percent of the population in the areas of Washington that have not met the standards for one of the NAAQS. Data on areas that continue to be monitored are collected by the Washington State Department of Ecology and local Clean Air agencies. Data for this report were provided by the Department of Ecology.

How safe and supportive are our communities?

Economic

Percent below poverty threshold

This indicator is measured by the percent of Washington State households with incomes less than twice the U.S. poverty threshold. In 2000, the federal poverty level for a family of four was $17,050; twice the federal poverty level was $34,100. The state Office of Financial Management collects information on household size and income on the State Population Survey and uses this information to calculate the percent of households with incomes less than twice the federal poverty rate. The State Population Survey is a telephone survey of the general population that focuses primarily on issues of employment, family poverty, immigration, health, and health insurance coverage. Information on the State Population Survey is available at http://www.ofm.wa.gov/sps/index.htm.

Social connectedness

Civic involvement/interpersonal trust

This measure is under development. The 2002 BRFSS includes one question from each of the five domains used in the Social Capital Index derived by Robert Putnam (Bowling Alone, 2000). We will develop an index similar to that recommended by Putnam or use a smaller set of questions if we find that a subset has the same predictive power as an index using all five questions. The five domains of the Social Capital Index are community organizational life (question 1 below), engagement in public affairs (question 2), community volunteerism (question 3), informal sociability (question 4), and social trust (question 5). For community organizational life and social trust, we selected the specific question from each domain with the highest correlation to the overall index. For engagement in public affairs and community volunteerism, we selected the measure that had good correlation to the overall index and could be asked in a self-report format. Finally, for informal sociability we are testing two questions. While one has a slightly higher correlation with the rest of the scale, the other might provide more objective responses. All of these questions have been used previously on large national surveys. The questions and response categories are as follows:

1. In the past year, did you serve on a committee for a local organization? Yes, No, Don't know, Refused

2. In the past year, did you attend a public meeting on town or school affairs? Yes, No, Don't know, Refused

3. How many times, if any, did you do volunteer work in the past year? None, Number of times per week, month, or year with respondents using the time frame that is easiest for them, Don't know, Refused

4a. How many times, if any, did you entertain people in your home in the past year? None, Number of times per week, month, or year with respondents using the time frame that is easiest for them, Don't know, Refused

4b. I spend a lot of time visiting friends. Agree, Disagree

5. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people? Most people can be trusted, Can't be too careful, Depends, Don't know, Refused.

General information on BRFSS can be found at http://www.doh.wa.gov/HWS/doc/AppendixB.doc.

School retention rates

This is measured as the percent of students enrolled in grade 9-12 in October who are not coded to "drop out" or "status unknown" in June of the same academic year. These data are provided by the Office of Superintendent of Public Instruction. Information is available at http://www.k12.wa.us/dataadmin/#dropoutgrad.

Injuries and violence

Unintentional injuries

Unintentional injuries are measured as the number of deaths per 100,000 population with an underlying cause of unintentional injury. These data are available through the death certificate. Information on the death certificate system can be found at http://www.doh.wa.gov/HWS/doc/AppendixB.doc. Population data needed to calculate rates are developed by the Office of Financial Management and available at http://www.ofm.wa.gov/pop/index.htm#est.

Domestic violence

The number of offenses involving domestic violence per 1,000 population is reported by local police jurisdictions to the Washington Association of Sheriffs and Police Chiefs (WASPC). Offenses include felonies, gross and simple misdemeanors, and violations of protection and no contact orders. An offense does not necessarily involve an arrest. Reporting to WASPC is voluntary, but WASPC estimates that reporting covers 98% of Washington's population. Data are available from http://www.waspc.org/wucrwibr/index.shtml. The rates reported in this Report Card are based on the entire population, even though the offenses cover about 98% of the population. While this practice does not result in substantive errors when using offenses for the entire state, local jurisdictions need to determine whether a large enough portion of their population is covered by the voluntary reporting to allow use of the total population or whether populations that are not covered need to be excluded in calculating rates. Population data needed to calculate rates are developed by the Office of Financial Management and available at http://www.ofm.wa.gov/pop/index.htm#est.

Child abuse and neglect

Child abuse and neglect is measured as the unduplicated number of children in Washington younger than 18 years old in referrals accepted for investigation by Washington State Child Protective Services (CPS) per 1,000 children. About half of referrals to CPS are accepted, meaning that they passed an initial screening to determine whether investigation was required. Reports that do not provide enough information, that have no legal basis for complaint, or where the child cannot be located are not accepted for investigation. Also, if the suspected perpetrator is not a caretaker, the case might not be accepted by CPS but might instead be referred to law enforcement authorities for investigation. But CPS can become involved if the perpetrator is a licensed caretaker or if the child's parent or guardian refuses to remove the child from a situation that places the child at risk of abuse. These data do not include findings of the subsequent investigation. "Unduplicated" means that each child is counted only once even if he or she is reported several times during a year. Information on the number of children involved in accepted referrals was provided by the Washington State Department of Social and Health Services, Children's Administration. Population data needed to calculate rates are developed by the Office of Financial Management and available at http://www.ofm.wa.gov/pop/index.htm#est.

Violent crimes
This indicator reports the number of serious violent crime offenses reported per 100,000 population. Serious violent crimes include murder, rape, robbery, and aggravated assault. Because not all serious violent crimes result in an arrest, reported offenses provide a more complete indicator of violence than do arrests. These data are developed in the same manner as the data for domestic violence described above.

How supportive is our health care system?

Access to health care
Access to health care is measured as the percent of households in which people report being unable to obtain health care or experiencing difficulty or delay in obtaining health care. Households are counted as being unable to obtain health care or experiencing difficulties or delays if a BRFSS respondent answers "yes" to any of the following questions:

- In the last 12 months, were you or any adult in your household unable to obtain any type of health care you or they thought was needed?
- In the last 12 months, did you or any adult in your household experience difficulty or delay in obtaining any type of health care you or they thought was needed?
- In the last 12 months, were any children living in your home unable to obtain any type of health care you thought they needed?
- In the last 12 months, did any children living in your home experience difficulty or delay in obtaining any type of health care you thought they needed?

These questions were added to the Washington BRFSS in 2001. We plan to ask them every two years. The questions are similar to those asked on the Medical Expenditure Panel Survey (MEPS), which is administered as a computer-assisted, in-person interview to a representative sub-sample of the National Health Interview Survey (NHIS). The data are used at the national level in conjunction with NHIS to monitor use of medical care services, access to care, and satisfaction with care. General information on BRFSS can be found at http://www.doh.wa.gov/HWS/doc/AppendixB.doc.

Vaccine-preventable diseases
The Washington Administrative Code (WAC) 246-101 requires that health care providers, hospitals, and/or laboratories report diseases of public health importance to state or local public health officials. These reports are compiled at the state level and become part of the Infectious Disease Reporting System. This indicator provides a rate per 100,000 people for the following diseases:

- *Haemophilus influenzae*
- Hepatitis A
- Hepatitis B
- Measles
- Mumps
- Pertussis
- Polio
- Rubella
- Tetanus

Information on the Infectious Disease Reporting System is available at http://www.doh.wa.gov/HWS/doc/AppendixB.doc. Population data needed to calculate rates is developed by the Office of Financial Management and available at http://www.ofm.wa.gov/pop/index.htm#est.

How healthy are our behaviors?

Do we smoke cigarettes?

This indicator is measured as the percent of BRFSS respondents who answer "no" to "Have you smoked at least 100 cigarettes in your entire life?" or "Not at all" to "Do you now smoke cigarettes every day, some days, or not at all?" While other forms of tobacco use and exposure to second hand tobacco smoke also have detrimental effects on health, cigarette smoking is the most common type of tobacco use. The questions on cigarette smoking have been asked annually since 1987. Information on BRFSS is available at http://www.doh.wa.gov/HWS/doc/AppendixB.doc.

Do we eat fruits and vegetables?

A healthy diet includes numerous factors, such as maintaining a balance among protein, carbohydrates, and fats; eating the number of calories needed to maintain a healthy weight; eating at least five servings of fruits and vegetables each day; and providing breast milk for children for at least six months. The nutrition indicator is the percent of BRFSS respondents who report consuming fruits and vegetables at least five times per day. The measure is a composite of six BRFSS questions that ask how many times the respondent drinks fruit juice and eats fruit, potatoes, carrots, green salad, and other vegetables. The respondent can answer with the number of times each day, week, month, or year.

Substantial evidence suggests consuming at least five daily servings of fruits and vegetables can prevent cancer in the mouth, pharynx, larynx, esophagus, lung, stomach, colon, rectum, bladder, and cervix. Recent evidence also suggests eating fruits and vegetables, regardless of fat intake, might prevent coronary heart disease and stroke. The BRFSS measures times per day, not servings. A special survey conducted by DOH in 1998 indicated that the percent of people consuming at least five servings each day is about double the percent who consume fruits and vegetables at least five times each day.

Information on BRFSS is available at http://www.doh.wa.gov/HWS/doc/AppendixB.doc.

Are we physically active?

Physical activity is measured as the percent of BRFSS respondents who report physical activity at work or report meeting CDC's recommendations for moderate or vigorous physical activity during their leisure time.

- Physical activity at work is measured as those who answer "mostly walking" or "mostly heavy labor or physically demanding work" in response to the question, "When you are at work, which of the following best describes what you do?" OR
- Those who meet recommendations for moderate leisure-time physical activity report at least five days a week and at least 30 minutes a day in response to the questions, "In a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate?" If yes, "How many days per week do you do these moderate activities for at least 10 minutes at a time?" and "On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?" OR
- Those who meet recommendations for vigorous physical activity report at least three days a week and at least 20 minutes a day in response to the questions, "In a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?" If yes, "How many days per week do you do these vigorous activities for at least 10 minutes at a time?" and "On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?"

The questions on moderate and vigorous physical activity include an introductory sentence that tells people not to consider activity at work.

Information on BRFSS is available at http://www.doh.wa.gov/HWS/doc/AppendixB.doc.

Do we abuse alcohol?

Negative health effects of alcohol are associated with greater quantities and duration of use. We cannot measure alcohol abuse directly, but people who drink five or more drinks on one occasion are at risk for alcohol abuse. The report card measures the percent of BRFSS respondents who answer "one or more times" to the question, "Considering all types of alcoholic beverages, how many times during the past 30 days did you have five or more drinks on an occasion?"

Information on BRFSS is available at http://www.doh.wa.gov/HWS/doc/AppendixB.doc.

Appendix 4: Administrative Services to Support Public Health Standards

Service	Measure	Examples of Documentation
Effective financial and management services are in place in all public health agencies.		
Accounting Systems	The accounting system identifies expenditures by funding source and use. The accounting reporting system provides timely financial management information.	
Budget Systems	The budget is tied to agency priorities, and monitored regularly.	
Financial Management	Internal controls are written and followed for: • Financial management • Compliance with standard accounting principles • Grants, contracts, and procurement Recommendations and findings from audits are promptly addressed. Guidelines and policies exist regarding revenue generation.	
Facilities	Facilities are not a barrier to effective and efficient provision of public health services.	
Asset Management (Facilities, Fleet, Fixed)	Procedures are established for recording fixed assets, and the agency maintains a current fixed asset inventory. Control measures are established for small and attractive items with value less than minimum for fixed assets.	Set minimum value for fixed assets at appropriate level. Establish estimated life, salvage value, and depreciation schedule for fixed assets. Develop maintenance schedule necessary to insure usable condition over estimated life. Develop long-term plan to assure adequate allocation of resources for replacement of fixed assets.

Service	Measure	Examples of Documentation
Leadership and Governance sets the agency policies and direction.		
Public Relations and Communications	Leadership and Governance sets the agency public communication plan, which includes increasing the public understanding of the mission of public health and the role of public health services. Customer service goals are established. Appropriate intergovernmental relations exist to allow appropriate policies to be developed and the agency direction is realized. Guidelines are written regarding outside/ media communications, and a media contact is established. Public relations efforts include risk communication principles. Guidelines are written regarding internal communication. Procedures are in place for communication with decision-making bodies and elected officials.	Policies to respond to citizen calls, e-mails, letters Communication with: • Board of Health • State Legislature • Congress
Organization Planning and Development	A plan is developed that includes: • Division and program plans • Strategic plans • Community involvement Agency policies and procedures are written and followed. Quality improvement strategies are used.	Vision and mission statements Organization charts Written program plans
Risk Management	The agency has established written guidelines for effective management of risk and includes obtaining appropriate insurance coverage.	
Legal Authority and Responsibility	Appropriate documents exist that implement the laws and transfer authority and responsibility as needed for operations. The governing body demonstrates knowledge and understanding of its role, authority and responsibility under the law.	

Service	Measure	Examples of Documentation
	The public health staff operates under its legal authority and responsibility.	Agency plan
	Policies regarding the regulatory authority are written and include documentation of the process.	
	Legal counsel is available.	
	Policies, local ordinances and administrative codes are accessible to the public.	
Human Resources support the public health workforce.		
Personnel Policies	Written personnel rules are up-to-date and available to all staff.	
	Every position has a written job description and written classification description that is available to all staff.	
	The salary schedule is published for each classification.	
	The agency complies with personnel laws and regulations.	
Performance Management	A system is in place for employees that recognizes strengths, addresses deficiencies, and includes a development plan.	
Recruitment and Retention	A system is in place that ensures timely recruitment.	No position for which the agency is recruiting is left vacant for longer than 6 months.
Labor Relations	A system is in place that ensures retention of qualified staff.	
Information Systems support the public health mission.		
Information Systems	Information technology and back-up systems are available, reliable, appropriate, secure, and supported.	
Resources	Information technology resources are available to provide timely data and information to staff when needed.	
Information Systems Policies	Information technology policies and procedures are written and monitored for compliance.	

Appendix 5: Public Health Activities

The PHIP Finance Committee developed a cost model to calculate the true cost of performing state and local public health services that should be available in every community in Washington. The committee organized these activities according to *Standards for Public Health in Washington State*. The following list of activities are grouped by public health standard.

Understanding Health Issues

Understanding community health status via epidemiology, including collecting vital statistics, screening (local role)

- Infectious and non-infectious
- Primary data collection on health risk behaviors
- Collect and analyze data on health status

Collect vital statistics

- Primary data collection on selected and dissemination of critical health services including consumer satisfaction (PRAMS, CHILD Profile, oral health)

Screening

- Tracking immunization status and mobilization based on findings; identifying clusters of health problems, surveillance

Health planning, implementation, and evaluation

- Community collaboration—accessing and analyzing data, working with communities to use the data in public health planning
- Emerging issues (gene replacement therapy, antibiotic resistance, bioterrorism)
- State role in health professionals licensing, collection and maintenance of hospital and patient data, newborn screening, epidemiology, and communicable disease technical assistance

Protecting People from Disease

Case investigation

- Screening (specimen collection and analysis)
- Testing
- Lab (identification and diagnosis)
- Diagnosis (clinical and lab identification)

Case preparation

- Administrative—overarching all communicable disease activities

Surveillance

- Reporting (transmission of information)
- Data analysis (monitor and interpret)
- Data gathering (collecting information and collection systems)

Epidemiological investigation

- Case finding (identifying cases and location)
- Contact tracing (identifying potential exposure)
- Lab (identification and diagnosis)
- State role

State role in epidemiology, vital statistics, public health laboratory

System response in disease outbreak and education

- System intervention in response to outbreak: Immunizations, including system tended by partners, screening based on events (lead, investigation, education) where the public health system is expected to be involved
- Treatment and prophylactic treatment in response to outbreak (dispensing, shots, application, observation)
- Ongoing counseling (one-on-one education and therapy)
- Ongoing public and provider education (informing general public and outbreak-specific)

Health officer—clinician role

- Includes communicable disease activities, assessment, immunizations and public information activities, and environmental health rules
- State role, including clinical lab services, clinical and environmental microbiology, infectious disease control

Assuring a Safe, Healthy Environment for People

Food safety (local role)

- Inspections, education, permitting

Food safety (state role)

- Rulemaking
- Technical assistance and training/education
- Epidemiology
- Legislation analysis and development
- Recall coordination, emergency response, and planning
- Program evaluation and management

Shellfish (mostly state role)

- Inspections, education, permitting, data analysis
- Epidemiology
- Export certifications
- Enforcement, rulemaking
- Environmental monitoring—biotoxins and water
- Tribal liaison
- Pollution source assessment
- Restoration

Water recreational facility safety (mostly local role)

- Inspections, education, permitting, data management
- Drug labs and other hazardous materials sites (state and local role): assessment, inspection, testing oversight, clean-up oversight

Solid waste management

- Permitting, inspection, enforcement, education—local and state role

Water quality control

- Sewage (wastewater management permitting, inspection, enforcement, education, and operations and maintenance—include existing and new systems)
- Minimum local capacity to address ground water; vector/rodent control/zoonotic disease (both state and local role in inspection, enforcement, education, sampling of tickborne disease, Hantavirus, West Nile virus, emerging pathogens, research and surveillance, interface with veterinary community); air quality monitoring for indoor investigation

Drinking water

- State role includes state plan review, sanitary survey, public funding of improvements, participation on economic vitality work groups, reuse, conservation efforts, natural resource management concerns
- Local role should include permit, inspection, enforcement, education, drinking water data

Surface water

- Drinking water permit, inspection, enforcement, education, environmental monitoring

Housing/public lodging inspections

- Temporary workers: inspections, enforcement
- Transient accommodations (hotel/motel, homeless shelters, group, transient and transitional housing): inspections, licensing, enforcement

Environmental laboratory services

School safety

- Inspection, reinspection, education, consultation

Radiation protection

- Air emissions, defense waste, environmental radiation, nuclear safety, radioactive materials, waste management, x-ray

Environmental health, community involvement

- State role in assessment, policy development, assurance, includes general environmental monitoring, environmental health lab, safety information and education

Environmental health involvement in land use planning and development permitting

Promoting Healthy Living

- Engage and mobilize community agencies, organizations and constituencies to address and develop locally designed programs driven by locally identified health issues, and assure that these services exist in the community
- Strategic planning (data gathering and analysis of goals and objectives based on community driven needs)
- Local data gathering and analysis

- Coalition building and stakeholders (developing community contacts, credibility, visibility and rapport to work with key stakeholders)
- Resource assessments (develop assessment of resources based on specific needs)
- Generate resources (design materials, find funding/write grants)
- Design and implement health promotion interventions, strategies, and policy-level materials
- Evaluate results
- Best practices (needs to address chronic illnesses and health behaviors)

Provide services for high-risk families

- Maternal and child health and early intervention services (intensive home visiting), child immunizations, children with special health care needs, and child death review

Inform, educate and empower people, linking them to needed services

- Assure quality (nurturing, safe, healthy) environments and child care settings

Nutrition and chronic conditions—education and outreach

- Activities specific to chronic disease—surge/episodic/ongoing infrastructure. Includes surveillance to ascertain chronic disease trends, identify clusters, special studies to identify risk factors and focus prevention efforts, prevention activities focused on behavioral and environmental/policy interventions, and evaluation of interventions to assure effectiveness

State roles in community wellness and prevention, promotion of maternal and child health programs and activities

Injury prevention

- Drowning prevention, helmets, elderly fall prevention

Helping People Get the Services They Need

Providing access or assuring people get the services they need

- Local assessment/assurance role: scanning the funding, political and economic environment; information and referral to maintain inventory of services and act as resource broker; create conditions that make action possible (including community mobilization) such as standards, policy, quality assurance, materials and supplies, information and education
  * Immunizations: vaccine distribution, schedules, storage
  * State role in family planning, community and rural health, and emergency medical services and trauma care systems
- Services that the governmental public health system may directly provide (but varies by local jurisdiction—other community partners may provide)
  * Women, Infants, and Children (WIC Program)
  * Immunizations: directly providing shots
  * Maternal support services
  * Targeted services to those identified by community assessment
  * Case management: HIV/AIDS, Maternal-Child Health, Children with Special Health Care Needs, Early Intervention, Child Protective Services
  * Case coordination to consolidate and coordinate issues and intervene on the part of a person or family
  * Family planning (local role): direct services
  * Screening for chronic conditions (breast and cervical health, diabetes)
  * Clinical lab services

Leadership, Governance, Policy Development, and Administration

Financial and management services

- Accounting and budget systems
- Contracts management system and procurement
- Grants compliance
- Asset management (fleet, facilities, fixed)

Leadership and governance

- Communication and public relations
- Organization direction
- Relationship building
- Program planning and evaluation
- Fundraising
- Risk management
- Legal authority and responsibilities
- Policies and procedures
- Regulations processes

Human resources

- Personnel system and agency employee policies
- Employee development system (including recognition)
- Compensation and benefits management

Information systems

- Hardware/software systems
- Networking and data sharing systems
- Policies

Appendix 6: Proposed Public Health Competencies

New coalitions and alliances

- Analyze information and influence diverse groups to participate in public health activities.
- Identify potential strategic partners.
- Facilitate and form various work groups, alliances, and coalitions and use community mobilization methods and tools appropriate to the local community.
- Foster trusting and effective relationships with diverse groups.

Communication

- Manage information dissemination to diverse entities including the public, legislators, local Boards of Health, and the news media.
- Interact with the public and the media especially with regard to risk communication.
- Balance legal and confidentiality issues for the public benefit.
- Use the most effective, efficient, and expedient telecommunications media for individual public health situations.

Results-based accountability system

- Develop a strategic plan that identifies goals, objectives, and performance measures and has a process to monitor and evaluate achievements.
- Develop, maintain, and evaluate:
  * Operating infrastructure (accounting, budget, contracts, procurement, grants compliance, facilities, and risk management systems)
  * Program and administrative written policies, procedures, and protocols
- Use program evaluation and cost efficiency tools (cost benefit analysis, return on investment tools) to monitor and evaluate effectiveness of results and adjust as indicated.
- Evaluate resource utilization.

Information technology systems

- Enable collection and access to information on current health topics, demographics (including vital statistics), and health outcome indicators.
- Implement data collection processes that ensure technology transmission compatibility and systems storage. Processes should also assure access to client treatment and case management plans, current health topics and updates, and community demographic and infrastructure information.
- Provide information in user-friendly formats in a timely manner.
- Guide the collection, analysis, and dissemination of health status information.
- Collect, analyze, and organize data and information for staff, public health partners, and clients.
- Use software available within the agency to perform research, record keeping, communication (e.g., e-mail, word processing programs), data analysis and interpretation (including simple spreadsheet programs), and reporting tasks.
- Use web-based applications for searching and retrieving information.

Technical and professional competencies

- Create an environment that embraces workforce development methods to build staff capacity through continuous learning opportunities.
- Apply workforce development principles (personnel rules, compensation, employee policies).
- Use commonly applied workforce development tools (needs assessment, training, learning and development plans, evaluations, etc.) and apply as needed to develop staff.
- Identify and apply current relevant scientific and technical information.
- Apply the consultation process to differing aspects of the internal and external consultant roles as appropriate to the situation and stakeholders.
- Model and encourage creativity and vision in the application of technology to improve services and productivity.
- Improve knowledge, skills, and abilities to improve performance in the short-term and long-term.

Public health policy, authority, and responsibility

- Apply and practice leadership principles and skills.
- Analyze, evaluate, and communicate public policy choices.
- Interpret and apply laws and regulations that pertain to public health authority and responsibility.
- Apply an understanding of the value and costs of public health services to make strategic decisions regarding funding choices.

Quality improvement

- Apply strategic quality improvement methodologies that are aligned with program goals, stakeholder input, etc.
- Evaluate needs and develop a quality improvement plan.
- Foster an environment where quality improvement is embraced and applied as part of everyday work.

Systems thinking

- Understand the need to see interrelationships rather than cause-effect chains; evaluate key stakeholder interests to find commonalities that benefit the public health system.
- Be proactive and manage the processes of change.
- Promote and facilitate organizational learning.
- Be creative and flexible in identifying and evaluating alternatives, and anticipate the consequences of actions and responses.
- Optimize opportunities to improve the health status of the community.
- Demonstrate ability to address problems with new and effective solutions.

Visionary leadership

- Define key values and use these principles to guide action.
- Participate in scanning the environment, internally and externally, for information critical to the agency's mission.
- Keep the mission in focus and articulate it clearly.
- Facilitate creation of a vision of excellence and a scenario of a preferred future.
- Allow others to be empowered to create and implement plans to enact the shared vision.
- Coach, inspire, and motivate staff and others to accomplish agency mission.

Appendix 7: Menu of Critical Health Services

This Menu identifies health care services and health conditions or risks for which appropriate services—screening, education and counseling, and interventions—are needed.

General access to health services

- Ongoing primary care
- Emergency medical services and care
- Consultative specialty care
- Home care services
- Long-term care

Health risk behaviors

- Tobacco use
- Dietary behaviors
- Physical activity and fitness
- Injury and violence prevention (bike safety, motor vehicle safety, firearm safety, poison prevention, abuse prevention)
- Responsible sexual behavior

Communicable and infectious diseases

- Immunizations for vaccine-preventable diseases
- Sexually transmitted diseases
- HIV/AIDS
- Tuberculosis
- Other communicable diseases

Pregnancy and maternal, infant, and child health and development

- Family planning
- Prenatal care
- Women, Infants and Children (WIC) services
- Newborn and early childhood services
- Well child care

Behavioral health and mental health services

- Substance abuse prevention and treatment
- Depression
- Suicide/crisis intervention
- Other serious mental illness

Cancer services

- Cancer-specific screening (i.e., breast, cervical, colorectal) and surveillance
- Specific cancer treatment

Chronic conditions and disease management

- Diabetes
- Asthma
- Hypertension
- Cardiovascular disease
- Respiratory diseases (other than asthma)
- Arthritis, osteoporosis, chronic back conditions
- Renal disease

Oral health

- Dental care services
- Water fluoridation

The Core Functions of Public Health

Public health officials focus on "what we as a society do collectively to assure the conditions in which people can be healthy." (Institute of Medicine, 1988) The field of public health seeks to mitigate factors that threaten people's health and works to create conditions that improve or promote good health. In this way, public health services are "population-based." These services can be organized into three "core functions," as described below.

Health Assessment

Helps us determine how, where, and when health threats are occurring. It includes collection, analysis, and dissemination of information on health status, incidence of health problems and risks, choices about health behavior, environmental health concerns, availability and quality of services, and the concerns of individuals.

Policy Development

Used to set a course for specific action or regulation to improve or protect health. It may involve a formal public process, as with a local Board of Health. Private organizations and citizen groups also develop public health policy.

Assurance

Means making sure the right things happen—that we have the health information we need, that we adhere to the policies we have chosen, and that needed services are available. Government programs often play an assurance or oversight role, but they do not provide all the needed services. The public health system depends on the combined efforts of many private, community-based, and public agencies.

Ten Essential Services of Public Health

Assessment

- Monitor health status of the community.
- Diagnose and investigate health problems and hazards.
- Inform and educate people about health issues.

Policy Development

- Mobilize partnerships to solve community problems.
- Support policies and plans to achieve health goals.

Assurance

- Enforce laws and regulations to achieve health goals.
- Link people to needed personal health services.
- Ensure a skilled public health workforce.
- Evaluate effectiveness, accessibility, and quality of health services.
- Research and apply innovative solutions.

The *2002 Public Health Improvement Plan* summarizes the work of many people who have joined efforts in committees and work groups. More detailed, full reports are available.

To obtain copies of this report, or copies of committee reports, please contact:

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